

SOUTH DAKOTA
WATER PERMIT NO. 8107-3

Date of first receipt of application February 25, 2015.

The Water Management Board approved Water Permit No. 8107-3 on May 7, 2026 for Bixler Farms, 39477 184th Street, Hitchcock SD 57348, authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8107-3 appropriates an additional 1.78 cubic feet of water per second (cfs), adds a new well, and irrigates an additional 180 acres, to what is currently authorized by Water Right No. 3052-3. Water Right No. 3052-3 appropriates 1.88 cfs from one well completed into the Tulare: Western Spink Hitchcock Aquifer (65 feet deep) located in the NE 1/4 SW 1/4 Section 6, with 140 acres being irrigated in the SW 1/4 NE 1/4, S 1/2 NW 1/4, SW 1/4, W 1/2 SE 1/4 Section 6; all in T114N-R62W. This permit authorizes appropriation of an additional 1.78 cfs from one new well to be completed into the Tulare: Western Spink Hitchcock Aquifer (approximately 65 feet deep) located near the approximate center of the NW 1/4 Section 6 for irrigation of 180 additional acres located in the NW 1/4, W 1/2 NE 1/4, SW 1/4, W 1/2 SE 1/4, NE 1/4 SE 1/4 Section 6; all in T114N-R62W. This Permit, and Water Right No. 3052-3 authorize a combined total of 3.66 cfs from two wells for irrigation of 320 acres. This site is located approximately six and one-half miles northeast of Hitchcock SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – October 31.
3. The date from which applicant may claim right is February 25, 2015.
4. One-fifth of the construction is to be completed on or before November 7, 2028.
5. All construction is to be completed on or before May 7, 2031.
6. Water is to be put to beneficial use on or before May 7, 2035.
7. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells approved under this Permit and Water Right No. 3052-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The proposed well for this permit and any future replacement wells must be constructed by a licensed well driller and construction of the wells and installation of the pumps must comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Adam Mathiowetz
Adam Mathiowetz, PE
Acting Chief Engineer
Water Rights Program

May 20, 2026
date



FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8107-3</u> (office use only) Hydrologic Unit <u>10160006</u>
	Basin <u>James River</u>
	Newspaper <u>Redfield Press</u>
	<u>Aberdeen American News</u>

RECEIVED
FEB 25 2015
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name to Appear on Irrigation Permit Bixler Farms
(check one) ☒ Owner ☒ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)

Mailing Address 39477 184th St. Hitchcock S.D. 57348
(Address) (City) (State) (Zip Code)

Home Phone 605-266-2763 Cell 354-3177 Email bixlerfarms@hotmail.com

2. Amount of water claimed 1.78 *CFS or 800 **GPM _____ ***AF Total Acreage 180
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion NE 1/4 center of NW 1/4 Sec 6-114-62
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)

County Spink

5. County or counties where water will be used Spink

6. Annual period during which water is to be used May 1 to Oct 1

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed) see acreage breakdown sheet & map

Total Acreage		New Acreage	
Land Description	Acres	Land Description	Acres
NW 1/4 Sec 6-114-62	110	NW 1/4 Sec 6-114-62	40
NE 1/4 Sec 6-114-62	50	NE 1/4 Sec 6-114-62	5
SE 1/4 Sec 6-114-62	60	SE 1/4 Sec 6-114-62	10
SW 1/4 Sec 6-114-62	100	SW 1/4 Sec 6-114-62	85

8. Give a description of the project. (Attach sheet if more space is needed)
would like to move center pivot (existing permit 3052-3) currently irrigating 140 acres at 800 gal/min. Diversion rate as reported on questionnaires) about 400' NE, add 3 spaws + corner system. Would drill 1 more well on NW 1/4. Hoping for additional 800 gal/min. pivot length would be 1800' plus 275' corner system. Designed by Inman Irr. Aberdeen Tim Swisher

I, Reed Bixler, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

1. Well Information

(check one or both as applicable)

☒ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by Stretch's Well Service
(if yes, please provide copies of logs)

b) If existing wells, how many ____ Provide copy of log(s), if available. Drilled by _____

c) Well Depth 65' Depth to Top of Water Bearing Material 15' Depth to Water from Surface 15'

d) Distance to nearest existing domestic well:

On applicant's property 4000' On property owned by others

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field)

b) System Capacity (gallons)	Year Constructed
1000	1980
2000	1985
3000	1990
4000	1995
5000	2000
6000	2005
7000	2010
8000	2015
9000	2020
10000	2025

c) Connected to the City of Sanitary System

3. Dugout Information

a) Surface Dimensions Depth

b) Depth to water (ground surface to water level)

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

b) Freeboard

c) Crest Width

Crest Length

d) Height

e) Primary Outlet Capacity

If pipe, diameter

f) Secondary Spillway Capacity

Spillway Width

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

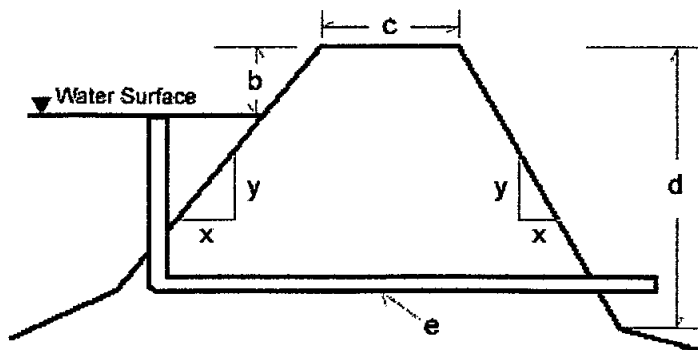
Upstream

Downstream

h) Surface Area of Impoundment

i) Storage	Acre Feet
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j) Drainage Area Above Dam	Acres
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ACREAGE BREAKDOWN FOR BIXLER FARMS APPLICATION IN SECTION 6, T114N, R62W

Quarter-quarter	Current configuration Under WR No. 3052-3	Proposed configuration	
NW ¼ NW ¼		17	
NE ¼ NW ¼		33	
SW ¼ NW ¼	13	33	
SE ¼ NW ¼	26	40	
NW ¼ NE ¼		13	
SW ¼ NE ¼	3	31	
NW ¼ SW ¼	30	32	
NE ¼ SW ¼	40	40	
SW ¼ SW ¼	4	10	
SE ¼ SW ¼	13	12	
NW ¼ SE ¼	10	38	
NE ¼ SE ¼		8	
SW ¼ SE ¼	1	13	
TOTAL	140	320	

320 ACRES 1600 gal/min

184th St

394th Ave

185th St

395th Ave

Cornwall

110 ACRES

100 ACRES

50 ACRES

60 ACRES

54.58

20.55

138.79

5.50

12.37

93.28

39.96

5.95

2.57

2.00

0.70

0.85

65.05

33.55

107.24

9.35

2.70

42.42

4.31

4.47

4.32

30.25

44.92

36

31

32

12

7

8

© 2015 AgriData, Inc.



maps provided by:

 **surety**
CUSTOMIZED ONLINE MAPPING

© AgriData, Inc. 2014 www.AgrIDataInc.com

6-114N-62W
Spink County
South Dakota

scale: 9298

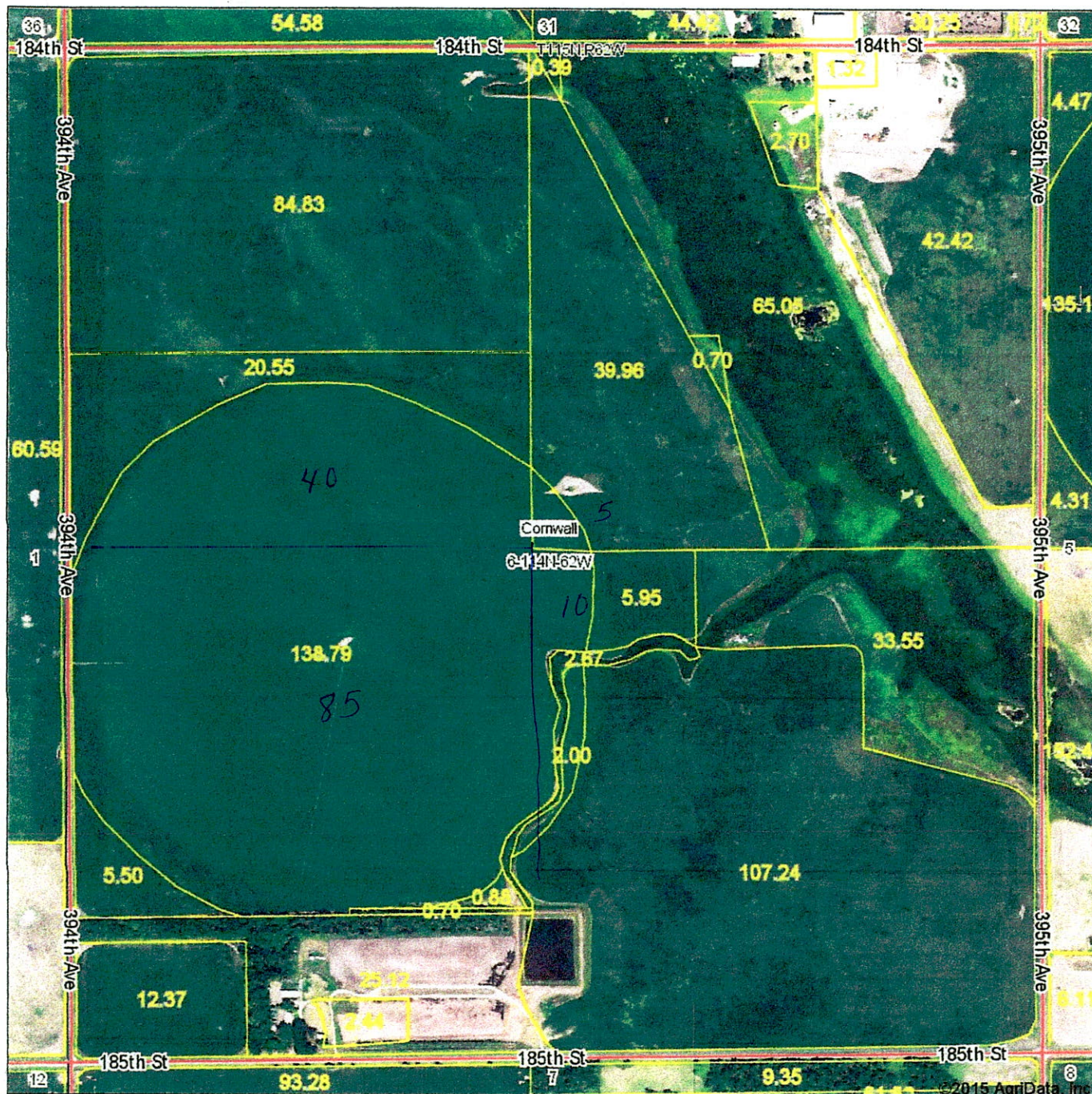


1/26/2015

Field borders provided by Farm Service Agency as of 5/21/2008. Aerial photography provided by Aerial Photography Field Office.

Permit 3052-3
140 ACRES 800gal/min

Aerial Map



Maps Provided By:



6-114N-62W
Spink County
South Dakota

map center: 44° 42.7377', 98° 19.9088'

scale: 9298



1/26/2015

Field borders provided by Farm Service Agency as of 5/21/2008. Aerial photography provided by Aerial Photography Field Office.

Water Permit Application for Bixler Farms
Section 6, T114N, R62W



CURRENT COVERAGE
UNDER WR NO. 3052-3



PROPOSED COVERAGE



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/12, 20 15

RECEIVED OF Bixler Farms 39477 184th St Hitchcock SD 57348

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>8107-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law) TOTAL	850	00

No. 07271

By *James Goodman*
Chief Engineer

Schlaak, Karen

From: Gronlund, Eric
Sent: Tuesday, February 24, 2015 4:21 PM
To: Schlaak, Karen
Subject: FW: acreage breakdown of proposed configuration of irrigation system in Section 6, T114N, R62W
Attachments: Bixleracreagebreakdown.pdf

Reed Bixler contacted me and said he concurred with the acreage breakdown contained in the attachment.

He also concurred that the pivot, if a permit is obtained, will cover 320 acres. This is 180 additional acres as he recognizes the existing water right is limited to the current 140 acres that are being irrigated.

I presume you will use this email and attachment as documentation of the file for this application.

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us

From: Gronlund, Eric
Sent: Thursday, February 12, 2015 4:26 PM
To: Reed Bixler (bixlerreed@hotmail.com)
Cc: Schlaak, Karen
Subject: acreage breakdown of proposed configuration of irrigation system in Section 6, T114N, R62W

Reed Bixler

Please review the attachment and let Water Rights know if this is a fair representation of the current system authorized by Water Right No. 3052-3 and the proposed expanded configuration of the center pivot system if Bixler Farms were to obtain a water right permit to do so.

Please note that Water Right No. 3052-3 was licensed for 180 acres but Bixler Farms has for a number of years only operated a 140 acre center pivot. The intent of the filed application is to expand the 140 acres historically irrigated to 320 acres. Therefore that is the basis for applying for 180 additional acres along with an additional well and diversion rate authority to operate the larger irrigation center pivot system.

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 3052-3

(1) WHEREAS, On the 14th day of September, A. D. 19 76
W. Trevor Bixler
 made Water Right Application No. 3052-3 for a permit to use 2.3 cubic feet per second of the waters of groundwater (one well)
 County of Spink, State of South Dakota, for Irrigation
 purposes; and
 (2) WHEREAS, On the 21st day of October, A. D. 19 76
 Permit No. 305233, with a date of priority of September 14, 1976
 was issued to said applicant for the diversion of said water, and provided for the completion of construction of the water supply system therein described on or before the 21st day of October, A. D. 19 81, and for the application to beneficial use of said water on or before the 21st day of October, A. D. 19 83

and:

(3) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to completion of the construction of the water supply system and is entitled to divert 1.88 cubic feet per second of water for beneficial use, and,

(4) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to the application of water to beneficial use of the following extent:

to irrigate a 180 acre circle in Section 6-T114N-R62W as follows:

SW $\frac{1}{4}$ 90 acres

NW $\frac{1}{4}$ 60 "

NE $\frac{1}{4}$ 10 "

SE $\frac{1}{4}$ 20 "

TOTAL 180 acres

(5) NOW, THEREFORE, By the virtue of the authority vested in us by the laws of the State of South Dakota, We hereby grant and confirm to W. Trevor Bixler

Hitchcock SD

of _____
the holder _____ and owner _____ of said permit No. 3052-3 a water right, dating from September 14, 1976
to use of 1.00 cubic feet per second of the waters
of groundwater (one well)

in the County of Spink and State of South Dakota, or so much thereof as may be necessary for the
purposes hereinafter mentioned, to be diverted at 1960 feet north and 1320 feet east of the SW
corner, Section 6-T114N-R62W

and conduct to and upon a 180 acre circle in Section 6-T114N-R62W, more fully described
on the face of this license

for the purpose of Irrigation

Subject to any limitations listed in Water Right Permit No. 3052-3 and subject to the laws of the State of South Dakota.

WITNESS: My hand and seal of our office at Pierre, South Dakota
this 4th day of November A. D.
Nineteen Hundred and Seventy-nine

WATER RIGHTS COMMISSION

By: John Hatch
Chief Engineer, Executive Office, JOHN HATCH



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

February 17, 2015

Bixler Farms
c/o Reed Bixler
39477 184th St
Hitchcock SD 57348

Dear Mr. Bixler:

Thank you for submitting the nine *Applications for a Permit to Appropriate Water* for irrigation from the Tulare Western Spink Hitchcock Aquifer.

In order to complete the application which proposes to increase the number of acres authorized by Water Right No. 3052-2, Eric Gronlund prepared the enclosed map and breakdown of acreage. Please review the enclosed and let us know if this is a fair representation of the current system authorized by Water Right No. 3052-3 and the proposed expanded configuration of the center pivot system if Bixler Farms were to obtain a water right permit to do so.

Please note that Water Right No. 3052-3 was licensed for 180 acres but Bixler Farms has for a number of years only operated a 140 acre center pivot. The intent of the filed application is to expand the 140 acres historically irrigated to 320 acres. Therefore, that is the basis for applying for 180 additional acres along with an additional well and diversion rate authority to operate the larger irrigation center pivot system.

In order to qualify and become part of the random selection process, a response from you is required by March 19, 2015. The other eight applications you submitted are complete.

If you have any questions, please contact Eric Gronlund or me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

February 25, 2015

denr.sd.gov

Bixler Farms
Reed Bixler
39477 184th St
Hitchcock SD 57348

Dear Mr. Bixler:

On February 12, 2015, the Water Rights Program received your nine *Applications for a Permit to Appropriate Water* from the Tulare:Western Spink Hitchcock Aquifer. All of the applications are now complete. They are as follows:

Application No. 8099-3 – 1.78 cubic feet of water per second (cfs) to irrigate 160 acres located in the NW 1/4 Sec 3-T114N-R63W.

Application No. 8100-3 – 1.78 cfs to irrigate 160 acres located in the SW 1/4 Sec 24-T115N-R63W.

Application No. 8101-3 – 1.78 cfs to irrigate 150 acres located in the SW 1/4 Sec 18-T114N-R62W.

Application No. 8102-3 – 1.78 cfs to irrigate 160 acres located in the SE 1/4 Sec 22-T114N-R63W.

Application No. 8103-3 – 1.78 cfs to irrigate 160 acres located in the SW 1/4 Sec 23-T114N-R63W.

Application No. 8104-3 – 1.78 cfs to irrigate 160 acres located in the SE 1/4 Sec 35-T115N-R63W.

Application No. 8105-3 – 1.78 cfs to irrigate 160 acres located in the SE 1/4 Sec 24-T114N-R63W.

Application No. 8106-3 – 1.78 cfs to irrigate 160 acres located in the NE 1/4 Sec 24-T114N-R63W.

Application No. 8107-3 – 1.78 cfs to irrigate 180 acres located in portions of Sec 6-T114N-R62W.

Your applications will be assigned a common priority date of February 25, 2015, along with other qualifying applications, and become part of the random selection process to create a priority list of applications. This priority list will determine the order in which applications are processed if the Water Management Board determines unappropriated water is available at a future date.

DENR anticipates the Board will select a method for conducting the random selection process at their March 4, 2015, meeting and conduct the random selection to establish the priority list at the May 6-7, 2015, meeting. You will be provided notice of the time, date and location set for the Board to conduct the random selection process creating the priority list.

If you have any questions, please contact Eric Gronlund or me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

RECEIVED

FEB 17 2015

WATER RIGHTS
PROGRAM

AFFIDAVIT OF
PUBLICATION
The Miller Press

STATE OF SOUTH DAKOTA)
JSS
County of Hand)

Michael G. Caviness of said county being first duly sworn, on oath, says that he is the publisher of *The Miller Press*, a weekly newspaper printed and published in Miller, said County of Hand by Hand County Publishing Co., Inc. and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bona-fide circulation of at least two hundred copies weekly, and has been published within said County for fifty-two successive weeks next prior to the publication of the notice, herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; that the

*Water Management
Tulare Spink*

a printed copy of which, taken from the paper in which the same was published, is attached to this sheet, and is made a part of this Affidavit, was published in said newspaper at least once each week for _____ successive week(s), on the day of each week on which said newspaper was regularly published, to wit:

1/14/2015: _____ 20
1/21/2015: _____ 20
_____ 20 : _____ 20

that the full amount of the fees for the publication of the annexed notice is

\$ 162.36
Michael G. Caviness
Michael G. Caviness, Publisher

Subscribed and sworn to before me

this 31 day of Jan, 2015
James L. Killeen
James L. Killeen, Notary Public
My Commission Expires: 6-26-19

Water Management Board for Tulare Western Spink Aquifer

NOTICE OF WATER MANAGEMENT BOARD DETERMINATION THAT THE TULARE WESTERN SPINK HITCHCOCK AQUIFER IS FULLY APPROPRIATED AND OF 30 DAY PERIOD TO FILE WATER RIGHT APPLICATIONS

The Water Management Board (Board) has determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deems the aquifer fully appropriated. The aquifer extends west of the James River from southern Spink County into northern Beadle County and into eastern Hand County. A map showing the approximate boundary of the aquifer and a copy of this notice are available at <http://denr.sd.gov/ap>.

Pursuant to SDCL 46-2A-7.1 and 46-2A-7.2, the Board is providing notice of its determination that the Tulare Western Spink Hitchcock aquifer is fully appropriated and providing notice of a thirty day application period during which the Chief Engineer shall accept and hold for future consideration applications to appropriate water from the aquifer. The thirty day application period begins at noon, Central Standard Time (CST) on January 26, 2015 and ends at noon CST on February 25, 2015. Completed applications shall be mailed to the Water Rights Program, 523 East Capitol Ave, Pierre, SD 57501. The date of receipt affixed to any application submitted within the thirty day application period shall be February 25, 2015. The Chief Engineer shall review each application for completeness in accordance with SDCL Chapter 46-2A and Administrative Rules of SD Chapter 74:02:01. The Chief Engineer shall also accept and hold any application submitted after the thirty day application period but such an application shall take the priority date as of the date of receipt of the application. Applications submitted prior to July 1, 2014, shall not be included in this process and must be resubmitted within the thirty day application period to be considered.

Following completion of the thirty day application period, the Board shall create a priority list of all complete applications submitted to the Chief Engineer within the thirty day application period. The priority list created by the Board determines the order of eligibility for any unappropriated water the Board may determine is available at a future date. At least every five years, the Board shall hold a public hearing to review the Tulare Western Spink Hitchcock aquifer, all permits appropriating water from the aquifer and all held applications to determine whether unappropriated water is available from the aquifer. Notice of the aquifer review will be published and provided to all applicants at the address on their application.

If you have any questions or need assistance obtaining or completing an application, please call Eric Gronlund or Ron Duvall at (605) 773-3352. Application forms and instructions are also available online at "<http://denr.sd.gov/wr>" by selecting the "Available forms" link. Application forms can also be requested by emailing denrinternet@state.sd.us with "Attn: Water Rights Program" in the subject line, or by writing us at SD Water Rights Program, 523 E Capitol Ave, Pierre SD 57501. Steven M. Pimer, Secretary, Department of Environment and Natural Resources.

Published 1-14-15 and 1-21-15 at the total approximate cost of \$162.36

RECEIVED

FEB 06 2015

WATER RIGHTS
PROGRAM

Affidavit of Publication

STATE OF SOUTH DAKOTA: ss
County of Beadle

I, **ELDON JACOBS**, do solemnly swear that I am the **Legal Advertising Coordinator** of the Huron Plainsman, printed and published at Huron, in the state of South Dakota, and that from my own personal knowledge and reference to the files of said publication, the display advertising for **SD ENVIRONMENTAL** was published in the Huron Plainsman in the size of: **2X14.5 - TULARE AQUIFIER**

JAN 15, 2015

Total Cost \$449.50



Subscribed & sworn to me before this 31ST day of JAN 2015


Notary Public

My Commission Expires 10/25/2017

FEB 06 2015

WATER RIGHTS
PROGRAM**Affidavit of Publication**

STATE OF SOUTH DAKOTA: ss
County of Beadle

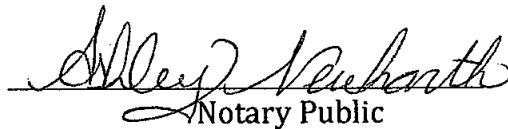
I, **ELDON JACOBS**, do solemnly swear that I am the **Legal Advertising Coordinator** of the Huron Plainsman, printed and published at Huron, in the state of South Dakota, and that from my own personal knowledge and reference to the files of said publication, the display advertising for **SD ENVIRONMENTAL** was published in the Huron Plainsman in the size of: **2X14.5 - TULARE AQUIFIER**

JAN 22, 2015

Total Cost \$449.50



Subscribed & sworn to me before this 31ST day of JAN 2015


Notary Public

My Commission Expires 10/25/2017

**NOTICE OF WATER MANAGEMENT BOARD
DETERMINATION THAT THE TULARE WESTERN SPINK
HITCHCOCK AQUIFER IS FULLY APPROPRIATED AND OF
30 DAY PERIOD TO FILE WATER RIGHT APPLICATIONS**

The Water Management Board (Board) has determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deems the aquifer fully appropriated. The aquifer extends west of the James River from southern Spink County into northern Beadle County and into eastern Hand County. A map showing the approximate boundary of the aquifer and a copy of this notice are available at <http://denr.sd.gov/ap>.

Pursuant to SDCL 46-2A-7.1 and 46-2A-7.2, the Board is providing notice of its determination that the Tulare Western Spink Hitchcock aquifer is fully appropriated and providing notice of a thirty day application period during which the Chief Engineer shall accept and hold for future consideration applications to appropriate water from the aquifer. The thirty day application period begins at noon Central Standard Time (CST) on January 26, 2015 and ends at noon CST on February 25, 2015. Completed applications shall be mailed to the Water Rights Program, 523 East Capitol Ave, Pierre, SD 57501. The date of receipt affixed to any application submitted within the thirty day application period shall be February 25, 2015. The Chief Engineer shall review each application for completeness in accordance with SDCL Chapter 46-2A and Administrative Rules of SD Chapter 74:02:01. The Chief Engineer shall also accept and hold any application submitted after the thirty day application period but such an application shall take the priority date as of the date of receipt of the application. Applications submitted prior to July 1, 2014, shall not be included in this process and must be resubmitted within the thirty day application period to be considered.

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**NOTICE OF WATER MANAGEMENT BOARD
DETERMINATION THAT THE TULARE EAST JAMES
AQUIFER IS FULLY APPROPRIATED AND OF 30 DAY
PERIOD TO FILE WATER RIGHT APPLICATIONS**

The Water Management Board (Board) has determined that the average annual withdrawal of water from the Tulare East James aquifer is equal to the average estimated annual recharge and deems the aquifer fully appropriated. The aquifer extends east of the James River from central Spink County into northern Beadle County. A map showing the approximate boundary of the aquifer and a copy of this notice are available at <http://denr.sd.gov/ap>.

Pursuant to SDCL 46-2A-7.1 and 46-2A-7.2, the Board is providing notice of its determination that the Tulare East James aquifer is fully appropriated and providing notice of a thirty day application period during which the Chief Engineer shall accept and hold for future consideration applications to appropriate water from the aquifer. The thirty day application period begins at noon Central Standard Time (CST) on January 26, 2015 and ends at noon CST on February 25, 2015. Completed applications shall be mailed to the Water Rights Program, 523 East Capitol Ave, Pierre, SD 57501. The date of receipt affixed to any application submitted within the thirty day application period shall be February 25, 2015. The Chief Engineer shall review each application for completeness in accordance with SDCL Chapter 46-2A and Administrative Rules of SD Chapter 74:02:01. The Chief Engineer shall also accept and hold any application submitted after the thirty day application period but such an application shall take the priority date as of the date of receipt of the application. Applications submitted prior to July 1, 2014, shall not be included in this process and must be resubmitted within the thirty day application period to be considered.

Following completion of the thirty day application period, the Board shall create a priority list of all complete applications submitted to the Chief Engineer within the thirty day application period. The priority list created by the Board determines the order of eligibility for any unappropriated water the Board may determine is available at a future date. At least every five years, the Board shall hold a public hearing to review the Tulare East James aquifer, all permits appropriating water from the aquifer and all held applications to determine whether unappropriated water is available from the aquifer. Notice of the aquifer review will be published and provided to all applicants at the address on their application.

If you have any questions or need assistance obtaining or completing an application, please call Eric Gronlund or Ron Duvall at (605) 773-3352. Application forms and instructions are also available online at "<http://denr.sd.gov/wr>" by selecting the "Available forms" link. Application forms can also be requested by emailing denrinter.net@state.sd.us with "Atten. Water Rights Program" in the subject line, or by writing us at SD Water Rights Program, 523 E Capitol Ave, Pierre SD 57501. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

mental & Natural Resources

RECEIVED

JAN 27 2015

Form 8

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Brown) SS

I, Mary Baster

certify that the attached printed Notice was taken

from the Aberdeen News

printed and published in Aberdeen

County of Brown and

state of South Dakota. The notice was published

in the newspaper on the following date:

January 15 & 22 2015

Cost of Printing \$967.20

Mary Baster
(Signature)

Adv. Batching Specialist
(Title)

January 22, 2015
(Date Signed)

NOTICE OF WATER MANAGEMENT BOARD DETERMINATION THAT THE TULARE WESTERN SPINK HITCHCOCK AQUIFER IS FULLY APPROPRIATED AND OF 30 DAY PERIOD TO FILE WATER RIGHT APPLICATIONS

The Water Management Board (Board) has determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deems the aquifer fully appropriated. The aquifer extends west of the James River from southern Spink County into northern Beadle County and into eastern Hand County. A map showing the approximate boundary of the aquifer and a copy of this notice are available at <http://denr.sd.gov/wr>.

Pursuant to SDCL 46-2A-7.1 and 46-2A-7.2, the Board is providing notice of its determination that the Tulare Western Spink Hitchcock aquifer is fully appropriated and providing notice of a thirty day application period during which the Chief Engineer shall accept and hold for future consideration applications to appropriate water from the aquifer. The thirty day application period begins at noon Central Standard Time (CST) on January 26, 2015 and ends at noon CST on February 25, 2015. Completed applications shall be mailed to the Water Rights Program, 523 East Capitol Ave, Pierre, SD 57501. The date of receipt affixed to any application submitted within the thirty day application period shall be February 25, 2015. The Chief Engineer shall review each application for completeness in accordance with SDCL Chapter 46-2A and Administrative Rules of SD Chapter 74:02.01. The Chief Engineer shall also accept and hold any application submitted after the thirty day application period but such an application shall take the priority date as of the date of receipt of the application. Applications submitted prior to July 1, 2014, shall not be included in this process and must be resubmitted within the thirty day application period to be considered.

Following completion of the thirty day application period, the Board shall create a priority list of all complete applications submitted to the Chief Engineer within the thirty day application period. The priority list created by the Board determines the order of eligibility for any unappropriated water the Board may determine is available at a future date. At least every five years, the Board shall hold a public hearing to review the Tulare Western Spink Hitchcock aquifer, all permits appropriating water from the aquifer and all held applications to determine whether unappropriated water is available from the aquifer. Notice of the aquifer review will be published and provided to all applicants at the address on their application.

If you have any questions or need assistance obtaining or completing an application, please call Eric Gronlund or Ron Duval at (605) 773-3352. Application forms and instructions are also available online at <http://denr.sd.gov/wr> by selecting the "Available forms" link. Application forms can also be requested by emailing denrwater@denr.sd.gov and us with "Attention: Water Rights Program" in the subject line, or by writing us at SD Water Rights Program, 523 E. Capitol Ave, Pierre, SD 57501. Steven M. Pinner, Secretary, Department of Environment and Natural Resources.

Notice published twice at the approximate cost of: \$967.20.

Affidavit of Publication

RECEIVED

STATE OF SOUTH DAKOTA,
County of Spink: ss.

JAN 26 2015

WATER RIGHTS
PROGRAM

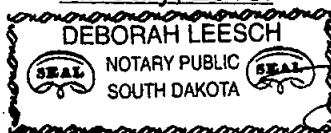
I, Mark E. Davis, of said County & State, being first duly sworn on oath, say that THE REDFIELD PRESS is a legal weekly newspaper as defined in Sec. 65.0508 South Dakota Code 1939, as amended by Chapter 298 of the Session of Laws of 1939, printed and published in the English language in the City of Redfield, in said County and State, by THE REDFIELD PRESS, and has been such newspaper during the time hereinafter mentioned, and that I Mark E. Davis, the undersigned, am Publisher of said newspaper in charge of the advertising department thereof, and have personal knowledge of all the facts stated in this affidavit, and that the legal or official notice entitled:

#1185 NOTICE

A printed copy of which is hereto attached, was printed and published in said newspaper in 2 successive issues, to wit: The first publication being made on January 14th, 2015, and the last publication being made on January 21st, 2015, that Fifty-six and .70/100 Dollars, insures to the benefit of the publisher of THE REDFIELD PRESS, that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever.



Subscribed and sworn to before me this 21st day of January, 2015.



Deborah Leesch
Notary Public, South Dakota

My commission expires 10/09/2019

Notice

#1185

NOTICE OF WATER MANAGEMENT BOARD DETERMINATION THAT THE TULARE WESTERN SPINK HITCHCOCK AQUIFER IS FULLY APPROPRIATED AND OF 30 DAY PERIOD TO FILE WATER RIGHT APPLICATIONS

The Water Management Board (Board) has determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deems the aquifer fully appropriated. The aquifer extends west of the James River from southern Spink County into northern Beadle County and into eastern Hand County. A map showing the approximate boundary of the aquifer and a copy of this notice are available at <http://denr.sd.gov/ap>.

Pursuant to SDCL 46-2A-7.1 and 46-2A-7.2, the Board is providing notice of its determination that the Tulare Western Spink Hitchcock aquifer is fully appropriated and providing notice of a thirty day application period during which the Chief Engineer shall accept and hold for future consideration applications to appropriate water from the aquifer. The thirty day application period begins at noon Central Standard Time (CST) on January 26, 2015 and ends at noon CST on February 25, 2015. Completed applications shall be mailed to the Water Rights Program, 523 East Capitol Ave, Pierre, SD 57501. The date of receipt affixed to any application submitted within the thirty day application period shall be February 25, 2015. The Chief Engineer shall review each application for completeness in accordance with SDCL Chapter 46-2A and Administrative Rules of SD Chapter 74:02:01. The Chief Engineer shall also accept and hold any application submitted after the thirty day application period but such an application shall take the priority date as of the date of receipt of the application. Applications submitted prior to July 1, 2014, shall not be included in this process and must be resubmitted within the thirty day application period to be considered.

Following completion of the thirty day application period, the Board shall create a priority list of all complete applications submitted to the Chief Engineer within the thirty day application period. The priority list created by the Board determines the order of eligibility for any unappropriated water the Board may determine is available at a future date. At least every five years, the Board shall hold a public hearing to review the Tulare Western Spink Hitchcock aquifer, all permits appropriating water from the aquifer and all held applications to determine whether unappropriated water is available from the aquifer. Notice of the aquifer review will be published and provided to all applicants at the address on their application.

If you have any questions or need assistance obtaining or completing an application, please call Eric Gronlund or Ron Duvall at (605) 773-3352. Application forms and instructions are also available online at "<http://denr.sd.gov/wr>" by selecting the "Available forms" link. Application forms can also be requested by emailing denrinternet@state.sd.us with "Atten. Water Rights Program" in the subject line, or by writing us at SD Water Rights Program, 523 E Capitol Ave, Pierre SD 57501. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published twice at the total approximate cost of \$56.70. (Jan 14, 21)

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Spink) SS

I, Tina Sanders

certify that the attached printed Notice was taken

from the Crode News

Doland Times Record

printed and published in Crode

County of Spink and

state of South Dakota. The notice was published

in the newspaper on the following date:

January 14 + 21st, 2015

Cost of Printing (89 lines)

\$9.27

Tina Sanders
(Signature)

Editor

(Title)

2/18/15

(Date Signed)

NOTICE OF WATER
MANAGEMENT BOARD
DETERMINATION THAT THE
TULARE WESTERN SPINK
HITCHCOCK AQUIFER IS
FULLY APPROPRIATED AND
OF 30 DAY PERIOD TO
FILE WATER RIGHT
APPLICATIONS.

The Water Management Board (Board) has determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deems the aquifer fully appropriated. The aquifer extends west of the James River from southern Spink County into northern Beadle County and into eastern Hand County. A map showing the approximate boundary of the aquifer and a copy of this notice are available at <http://denr.sd.gov/wr>.

Pursuant to SDCL 46-2A-7, 1 and 46-2A-12, the Board is providing notice of its determination that the Tulare Western Spink Hitchcock aquifer is fully appropriated and providing notice of a thirty day application period during which the Chief Engineer shall accept and hold for future consideration applications to appropriate water from the aquifer. The thirty day application period begins at noon Central Standard Time (CST) on January 26, 2015 and ends at noon CST on February 25, 2015. Completed applications shall be mailed to the Water Rights Program, 523 East Capitol Ave, Pierre, SD 57501. The date of receipt of any application submitted within the thirty day application period shall be February 25, 2015. The Chief Engineer shall review each application for completeness in accordance with SDCL Chapter 46-2A and Administrative Rules of SD Chapter 4.02.01. The Chief Engineer shall also accept and hold any application submitted after the thirty day application period but such an application shall take the priority date as of the date of receipt of the application. Applications submitted prior to July 1, 2014, shall not be included in this process and must be resubmitted within the thirty day application period to be considered.

Following completion of the thirty day application period, the Board shall create a priority list of all complete applications submitted to the Chief Engineer within the thirty day application period. The priority list created by the Board determines the order of eligibility for any unappropriated water the Board may determine is available at a future date. At least every five years, the Board shall hold a public hearing to review the Tulare Western Spink Hitchcock aquifer, all permits appropriating water from the aquifer and all held applications to determine whether unappropriated water is available from the aquifer. Notice of the aquifer review will be published and provided to all applicants at the address on their application.

If you have any questions or need assistance obtaining or completing an application, please call Eric Gronlund or Ron Duval at (605) 773-3352. Application forms and instructions are also available online at <http://denr.sd.gov/wr> by selecting the "Available Forms" link. Application forms can also be requested by emailing denrinternet@state.sd.us with "Water Rights Program" in the subject line, or by writing us at SD Water Rights Program, 523 E Capitol Ave, Pierre, SD 57501. Steven M. Pinner, Secretary, Department of Environment and Natural Resources.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

March 30, 2015

NOTICE

TO: Bixler Farms & Bixler Land
c/o Reed Bixler
39477 184th St
Hitchcock SD 57348

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Conduct Random Selection to Create a Priority List for Applications within the
Tulare Western Spink Hitchcock Aquifer

The Water Management Board published notice in mid-January that the Tulare Western Spink Hitchcock Aquifer is fully appropriated and provided a 30 day period to file water right applications. The 30 day application period expired at noon on February 25, 2015, with the Department of Environment and Natural Resources receiving 28 applications. Your applications are eligible for inclusion in a random selection process to be conducted by the Water Management Board to create the priority list. The priority list created by the Board determines the order of eligibility for any unappropriated water the Board may determine is available at a future date. You have nine applications eligible for the random selection process.

At the Board's March 6th meeting, a random selection process was chosen by the Board that entails drawing index cards to create the priority list. An index card will be prepared for each application with the application number and applicant's name being placed on the index card. The order in which each index card is randomly drawn from a container will determine the priority list.

The Water Management Board will conduct the random selection to create the priority list at 8:30 AM (Central Time) on Wednesday, May 6, 2015, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. Applicants are welcome to attend but you do not need to be present to have your application(s) included in the random selection drawing. After the priority list is determined by the Board, each applicant will be provided a copy of the priority list.

Please contact Eric Gronlund at (605) 773-3352 if you have questions regarding the random selection process.

c: Ann Mines-Bailey, Assistant Attorney General

Certification

I hereby certify that on March 30, 2015, I have personally hand delivered envelopes containing a Notice dated March 30, 2015, regarding the scheduling of the hearing to Conduct the Random Selection to Create a Priority List for Applications within the Tulare:East James and the Tulare:Western Spink Hitchcock Aquifers as addressed below:

- Larry R Lambert PO Box 1805 Wenatchee WA 98807-1805
- Gary and Ruth Felderman 40748 185th St Doland SD 57436
- Riverside Hutterian Brethren c/o Bennett Waldner 40361 200th St Huron SD 57350
- Julie A Hengen Living Trust
 - Farmers National Co. c/o Rod Geppert, Farm Manager 20174 N Hwy 1806 Ft Pierre SD 57532
- Gordie Hofer 40058 185th St Frankfort SD 57440
- Collins Hutterian Brethren, Inc. c/o Joey Wipf 19606 Collins Ave Iroquois SD 57353
- LeAnne Bawek 40320 176th St Doland SD 57436
- Bixler Farms Reed Bixler 39477 184th St Hitchcock SD 57348
- Van Buskirk Farms LLP Matthew Van Buskirk Po Box 72 Hitchcock SD 57348
- Glendale Colony Jerry Kleinsasser 17866 Glendale Dr. Frankfort SD 57440
- Randy Kuehn 17940 389th Ave Redfield SD 57469
- Geraldine Motley 3131 E Wahalla Lane Phoenix AZ 85050
- Martin Anderson 19411 394 Ave Hitchcock SD 57348
- Allen Gatzke & Jeffery Gatzke 39351 187th St Hitchcock SD 57348
- Loren or Cynthia Marzahn 39207 182nd St Redfield SD 57369
- Ken & Jodi Hofer 19343 398th Ave Hitchcock SD 57348
- Ronald Starr 40283 US Hwy 212 Doland SD 57436
- Jeff Hamilton, 19575 382nd Ave, Wessington SD 57381
- Scott Hamilton, 37989 191st St, Hitchcock SD 57348
- Herbert M Hamilton, 19549 382nd Ave, Wessington SD 57381

Sent Inter office to:

Ann Mines-Bailey, Assistant Attorney General, 1302 E Hwy 14, Suite 1, Pierre SD

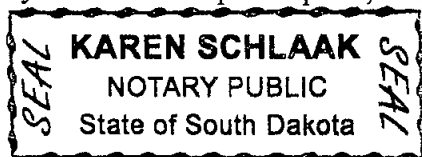

Gail Jacobson
Water Rights Program, DENR

[illegible]

Sworn to, before me, this 30th day of March, 2015

Karen Schlaak
Karen Schlaak, Notary Public

My commission expires April 1, 2019





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

April 27, 2015

NOTICE

TO: Bixler Farms & Bixler Land
c/o Reed Bixler
39477 184th St
Hitchcock SD 57348

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Change of Date to Conduct Random Selection to Create a Priority List for Applications within the Tulare Western Spink Hitchcock Aquifer

You have one or more applications eligible for the random selection process to create a priority list for applications within the Tulare Western Spink Hitchcock Aquifer. On March 30, 2015, notice was sent to you scheduling 8:30 AM on Wednesday, May 6, 2015, as the date and time for the Water Management Board to conduct the random selection to create the priority list. Due to an unforeseen circumstance the date has been changed to Thursday, May 7, 2015.

The Water Management Board will now conduct the random selection to create the priority list at 8:30 AM (Central Time) on Thursday, May 7, 2015, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. Applicants are welcome to attend but you do not need to be present to have your application(s) included in the random selection drawing. After the priority list is determined by the Board, each applicant will be provided a copy of the priority list.

Please contact Eric Gronlund at (605) 773-3352 if you have questions regarding the random selection process.

c: Ann Mines-Bailey, Assistant Attorney General

CERTIFICATION

I hereby certify that on April 27, 2015, I have personally hand delivered envelopes containing a Notice dated April 27, 2015, regarding the Change of Date to Conduct the Random Selection to Create a Priority List for Applications within the Tulare:East James and the Tulare:Western Spink Hitchcock Aquifers as addressed below:

Larry R Lambert PO Box 1805 Wenatchee WA 98807-1805

Gary and Ruth Felderman 40748 185th St Doland SD 57436

Riverside Hutterian Brethren c/o Bennett Waldner 40361 200th St Huron SD 57350

Julie A Hengen Living Trust

Farmers National Co. c/o Rod Geppert, Farm Manager 20174 N Hwy 1806 Ft Pierre SD 57532

Gordie Hofer 40058 185th St Frankfort SD 57440

Collins Hutterian Brethren, Inc. c/o Joey Wipf 19606 Collins Ave Iroquois SD 57353

LeAnne Bawek 40320 176th St Doland SD 57436

Bixler Farms & Bixler Land, c/o Reed Bixler 39477 184th St Hitchcock SD 57348

Van Buskirk Farms LLP Matthew Van Buskirk Po Box 72 Hitchcock SD 57348

Glendale Colony c/o Jerry Kleinsasser 17866 Glendale Dr. Frankfort SD 57440

Randy Kuehn 17940 389th Ave Redfield SD 57469

Geraldine Motley 3131 E Wahalla Lane Phoenix AZ 85050

Martin Anderson 19411 394 Ave Hitchcock SD 57348

Allen Gatzke & Jeffery Gatzke 39351 187th St Hitchcock SD 57348

Loren or Cynthia Marzahn 39207 182nd St Redfield SD 57369

Ken & Jodi Hofer 19343 398th Ave Hitchcock SD 57348

Ronald Starr 40283 US Hwy 212 Doland SD 57436

Jeff Hamilton, 19575 382nd Ave, Wessington SD 57381

Scott Hamilton, 37989 191st St, Hitchcock SD 57348

Herbert M Hamilton, 19549 382nd Ave, Wessington SD 57381

Sent Inter office to:

Ann Mines-Bailey, Assistant Attorney General, 1302 E Hwy 14, Suite 1, Pierre SD


Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)

) SS

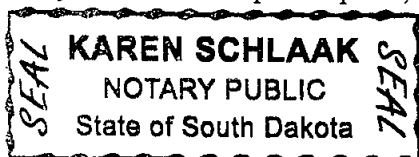
COUNTY OF HUGHES

)

Sworn to, before me, this 27th day of April, 2015

Karen Schlaak
Karen Schlaak, Notary Public

My commission expires April 1, 2019





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

Notice of Entry of Order

May 19, 2015

TO: Bixler Farms and Bixler Land
c/o Reed Bixler
39477 184th St
Hitchcock SD 57348

FROM: Jeanne Goodman, Chief Engineer, SD DENR Water Rights Program

A handwritten signature in black ink, appearing to read 'Jeanne Goodman', written over the printed name in the 'FROM' line.

SUBJECT: Priority List for Tulare Western Spink Hitchcock Aquifer

On May 7, 2015, the Water Management Board (board) held a hearing to create a priority list of applications to appropriate water from the Tulare Western Spink Hitchcock aquifer should water become available at a future date. Please note creation of this priority ranking list by the board does NOT mean your application has been approved. You cannot begin development of your irrigation system until such time there is water available, and the board approves your application. Enclosed is the list of applications with the applicant's name and the priority ranking number assigned by the board.

The random selection process used by the board to assign a ranking number consisted of drawing index cards (one index card per application) from a container. If the board determines water is available from the aquifer at some future date, the water will first be made available to the applicant with a priority ranking of "1" on the enclosed list. If there is still water available after satisfying the number "1" ranking, water will be made available to ranking "2" and so on until all of the available water is made available for appropriation. However, the aquifer is currently fully appropriated, and no new applications are being approved. A review of water availability from the aquifer will be conducted by the board at least once every five years.

Creation of the priority list for this aquifer was a one-time event by the board, and the ranking order may not be altered. Any applications submitted in the future will be junior to all of the applications on the enclosed priority list. As an applicant included in this priority list, you may leave your application on the list or you may withdraw the application at any time and get a refund of your application fee. If the application is withdrawn it cannot be added back in at a later date and retain the original ranking established by the board; it will be junior to all other applications. If the acreage described on your application comes under new ownership, a transfer of ownership needs to be filed by the new owner. Also, the application may not be transferred from the acreage described on the application to other acreage. No later than five years from now the board will review water availability from the aquifer to see whether any additional permits can be approved. Notice of the five year review will be mailed to the address provided on your application unless we are notified of a change in your address.

If you have any questions, please contact either Eric Gronlund or Ron Duvall at (605) 773-3352.

Certification

I hereby certify that on May 19, 2015, I have personally hand delivered envelopes containing a **Notice of Entry of Order** dated May 19, 2015, regarding the hearing to Conduct the Random Selection to Create a Priority List for Applications within the Tulare:East James and the Tulare:Western Spink Hitchcock Aquifers held on May 7, 2015 as addressed below:

Larry R Lambert PO Box 1805 Wenatchee WA 98807-1805

Gary and Ruth Felderman 40748 185th St Doland SD 57436

Riverside Hutterian Brethren c/o Bennett Waldner 40361 200th St Huron SD 57350

Julie A Hengen Living Trust

Farmers National Co. c/o Rod Geppert, Farm Manager 20174 N Hwy 1806 Ft Pierre SD 57532

Gordie Hofer 40058 185th St Frankfort SD 57440

Collins Hutterian Brethren, Inc. c/o Joey Wipf 19606 Collins Ave Iroquois SD 57353

LeAnne Bawek 40320 176th St Doland SD 57436

Bixler Farms Reed Bixler 39477 184th St Hitchcock SD 57348

Van Buskirk Farms LLP Matthew Van Buskirk Po Box 72 Hitchcock SD 57348

Glendale Colony Jerry Kleinsasser 17866 Glendale Dr. Frankfort SD 57440

Randy Kuehn 17940 389th Ave Redfield SD 57469

Geraldine Motley 3131 E Wahalla Lane Phoenix AZ 85050

Martin Anderson 19411 394 Ave Hitchcock SD 57348

Allen Gatzke & Jeffery Gatzke 39351 187th St Hitchcock SD 57348

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Ronald Starr 40283 US Hwy 212 Doland SD 57436

Jeff Hamilton, 19575 382nd Ave, Wessington SD 57381

Scott Hamilton, 37989 191st St, Hitchcock SD 57348

Herbert M Hamilton, 19549 382nd Ave, Wessington SD 57381


Gail Jacobson

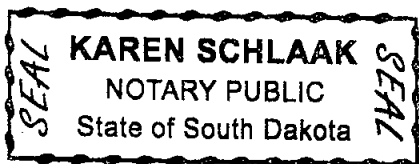
Gail Jacobson
Water Rights Program, DENR

[illegible]

Sworn to, before me, this 19th day of May, 2015

Karen Schlaak
Karen Schlaak, Notary Public

My commission expires April 1, 2019



STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

IN THE MATTER OF	)	
TULARE: WESTERN	)	PRIORITY LIST
SPINK/HITCHCOCK AQUIFER	)	

The Water Management Board, having determined the Tulare: Western Spink/Hitchcock aquifer was fully appropriated, publicly noticed its determination and provided a thirty day period for the submission of applications for the appropriation of water from this aquifer as required by SDCL § 46-2A-7.1. Twenty-eight applications for the appropriation of water from this aquifer were received. On May 7, 2015, the Water Management Board held a hearing and created a priority list for future unappropriated water from this aquifer using a random selection process pursuant to SDCL § 46-2A-7.4. The following is the resulting priority list:

Appl. No.	Applicant TULARE WESTERN SPINK/HITCHCOCK AQUIFER	Priority Ranking
8128-3	Riverside Hutterian Brethren Inc	1
8101-3	Bixler Farms	2
8137-3	Ken & Jodi Hofer	3
8085-3	Riverside Hutterian Brethren	4
8120-3	Martin Anderson	5
8131-3	Scott Hamilton	6
8138-3	Ken & Jodi Hofer	7
8106-3	Bixler Land	8
Continued on next page...		

Appl. No.	Applicant TULARE WESTERN SPINK/HITCHCOCK AQUIFER	Priority Ranking
8103-3	Bixler Land	9
8084-3	Riverside Hutterian Brethren	10
8105-3	Bixler Land	11
8129-3	Jeff Hamilton	12
8099-3	Bixler Farms	13
8111-3	Van Buskirk Farms LLP	14
8133-3	Scott Hamilton	15
8102-3	Bixler Land	16
8108-3	Van Buskirk Farms LLP	17
8110-3	Van Buskirk Farms LLP	18
8100-3	Bixler Farms	19
8121-3	Allen Gatzke / Jeffery Gatzke	20
8130-3	Jeff Hamilton	21
8107-3	Bixler Farms	22
8122-3	Allen Gatzke / Jeffery Gatzke	23
8083-3	Gary and Ruth Felderman	24
8109-3	Van Buskirk Farms LLP	25
8135-3	Loren or Cynthia Marzahn	26
8104-3	Bixler Farms	27
8132-3	Hamilton Family LLC	28

Dated this 7th day of May, 2015.

BY THE BOARD:



Chad Comes, Chairman
South Dakota Water Management Board

**Notice of Hearing
Regarding Five-Year
Review to Determine the
Availability of
Unappropriated Water in
the Tulare Western Spink
Hitchcock Aquifer**

The Water Management Board (Board) previously determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deemed the aquifer fully appropriated. A map showing the approximate boundary of the aquifer; a copy of a public notice; and a report prepared for the Board to review will be available for public viewing on September 17, 2020, at <https://denr.sd.gov/ap>.

Pursuant to statute, the Board held a hearing for the purpose of accepting applications for potential future appropriations from the aquifer and a creation of a priority list. That hearing was held on May 7, 2015. Twenty-eight applications were prioritized by the Board and are being held for possible future action.

Pursuant to SDCL 46-2A-7.5, the Board is required to hold a public hearing reviewing the groundwater source, all permits appropriating water from that source, and all held applications at least once every five years to determine whether unappropriated water has become available for use. The five-year review is scheduled for 10:30 AM (Central Time), on Wednesday, October 7, 2020, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. The Board is authorized to 1) determine that additional water is available for appropriation, 2) determine that no additional water is available for appropriation, or 3) defer action for further study. The hearing time is an estimate and may be delayed due to prior items on the agenda. Pursuant to SDCL 46-2-9, 46-2-11, and 46-2A-7.5, the Board has legal authority and jurisdiction to conduct this hearing.

Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Questions regarding the hearing may be directed to Ron Duvall, Water Rights Program at (605) 773-3352 or ron.duvall@state.sd.us.

Published once at the approximate total cost of \$47.40.

AFFIDAVIT OF PUBLICATION

RECEIVED

STATE OF SOUTH DAKOTA}

§

SEP 11 2020

COUNTY OF BROWN}

**WATER RIGHTS
PROGRAM**

Mary Vance being duly sworn, on his/her oath says: That the AMERICAN NEWS is a daily newspaper of general circulation, printed and published in Aberdeen, Brown County, South Dakota, by the Aberdeen News Company, a corporation, and has been such a newspaper during the times hereinafter mentioned; That affiant is an employee and principal clerk of said publisher and has personal knowledge of all facts stated in this affidavit; That the advertisement headed:

Lead # 880256
Notice of Hearing

a printed copy of which is hereunto attached, was printed and published in the regular and entire issue of said newspaper, and not in a supplement thereof, once each

Day for 1 successive Day
The first publication being made on the 9th day of Sept, 2020.
The second publication being made on the _____ day of _____, 2020.
The third publication being made on the _____ day of _____, 2020.
The fourth publication being made on the _____ day of _____, 2020.
The fifth publication being made on the _____ day of _____, 2020.
The sixth publication being made on the _____ day of _____, 2020;

That said newspaper is a legal newspaper published five days or more each week; with a bona fide circulation of more than two hundred copies daily; published in the English language within the said county of Brown for more than one year prior to the first publication of said notice; and printed in whole in an office maintained at the place of publication of said newspaper; That the whole amount of the fee paid for the publication of the annexed notice is \$ 47.40, which insures solely to the benefit of said publisher; That no agreement or understanding for a division thereof had been made with any other person; and That no part thereof has been agreed to be paid to any person whomsoever.

Mary Vance

Subscribed and sworn to before me this 9th day of Sept, 2020.

Daily Circulation 8000

[Signature]

Notary Public, Brown County, SD.

My commission expires March 20, 2025



SEAL

RECEIVED

SEP 18 2020

Notice of Hearing

#3878

Notice of Hearing Regarding
Five-Year Review to
Determine the Availability of
Unappropriated Water in the
Tulare Western Spink
Hitchcock Aquifer

The Water Management Board (Board) previously determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deemed the aquifer fully appropriated. A map showing the approximate boundary of the aquifer; a copy of a public notice; and a report prepared for the Board to review will be available for public viewing on September 17, 2020, at <https://denr.sd.gov/ap>.

Pursuant to statute, the Board held a hearing for the purpose of accepting applications for potential future appropriations from the aquifer and a creation of a priority list. That hearing was held on May 7, 2015. Twenty-eight applications were prioritized by the Board and are being held for possible future action.

Pursuant to SDCL 46-2A-7.5, the Board is required to hold a public hearing reviewing the groundwater source, all permits appropriating water from that source, and all held applications at least once every five years to determine whether unappropriated water has become available for use. The five-year review is scheduled for 10:30 AM (Central Time), on Wednesday, October 7, 2020, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. The Board is authorized to 1) determine that additional water is available for appropriation, 2) determine that no additional water is available for appropriation, or 3) defer action for further study. The hearing time is an estimate and may be delayed due to prior items on the agenda. Pursuant to SDCL 46-2-9, 46-2-11, and 46-2A-7.5, the Board has legal authority and jurisdiction to conduct this hearing.

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Questions regarding the hearing may be directed to Ron Duvall, Water Rights Program at (605) 773-3352 or ron.duvall@state.sd.us.

Published one time at the total approximate cost of \$22.20. (Sept. 9)

Affidavit of Publication

WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA,
County of Spink: ss.

I, Stacy Carroll, being duly sworn on oath, say that THE REDFIELD PRESS is a weekly newspaper as defined in Sec. 65.0508 South Dakota Code 1939, as amended by Chapter 298 of the Session of Laws of 1939, printed and published in the English language in the City of Redfield, in said County and State, by THE REDFIELD PRESS. I, Stacy Carroll, am Legal Advertising Coordinator of said newspaper and know the facts herein state. The annexed notice headed:

#3878 NOTICE OF HEARING

was printed and published in said newspaper in 1 issue, to wit: The first publication being made on SEPTEMBER 9th 2020. That the full amount of the fee charged for publishing TWENTY-TWO and 20./100 Dollars, insures to the benefit of the publisher of THE REDFIELD PRESS, that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever.

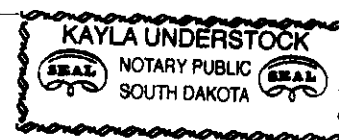
Stacy Carroll

Subscribed and sworn to before me this 9th day of SEPTEMBER 2020

Kayla Understock

Notary Public, South Dakota

My commission expires 09/26/2024



AFFIDAVIT OF
PUBLICATION
The Miller Press

RECEIVED

SEP 23 2020

WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA)
JSS
County of Hand)

Michael G. Caviness of said county being first duly sworn, on oath, says that he is the publisher of *The Miller Press*, a weekly newspaper published in Miller, said County of Hand by Hand County Publishing Co., Inc. and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has been published within said County for fifty weeks next prior to the publication of the notice, herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; that the

Tulare Western Spink Hitchcock Aquifer report to be reviewed

Notice of Hearing Regarding Five-Year Review to Determine the Availability of Unappropriated Water in the Tulare Western Spink Hitchcock Aquifer

The Water Management Board (Board) previously determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deemed the aquifer fully appropriated. A map showing the approximate boundary of the aquifer; a copy of a public notice; and a report prepared for the Board to review will be available for public viewing on September 17, 2020, at <https://denr.sd.gov/ap>.

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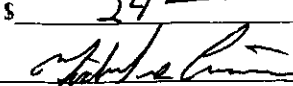
Questions regarding the hearing may be directed to Ron Duvall, Water Rights Program at (605) 773-3352 or ron.duvall@state.sd.us. Published Sept. 5, 2020 at approximate cost of \$24.67

Tulare Western Spink
Hitchcock Aquifer
report to be reviewed

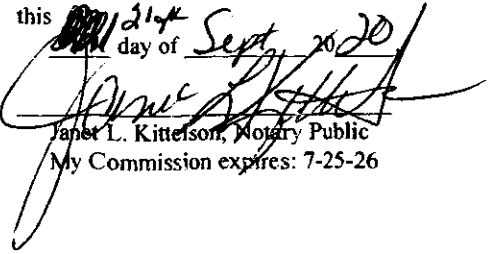
a printed copy of which, taken from the paper in which the same was published, is attached to this sheet, and is made a part of this Affidavit, was published in said newspaper at least once each week for 1 successive week(s), on the day of each week on which said newspaper was regularly published, to wit:

9/5 2020; _____ 20____
____ 20____; _____ 20____
____ 20____; _____ 20____

that the full amount of the fees for the publication of the annexed notice is

\$ 24.67

Michael G. Caviness, Publisher

Subscribed and sworn to before me this 21st day of Sept, 2020


Janet L. Kittelson, Notary Public
My Commission expires: 7-25-26

RECEIVED

SEP 22 2020

WATER RIGHTS
PROGRAM

Proof Of Publication

Huron Plainsman
49 3rd Street SE
Huron, SD 57350
605-353-7402

Legal Notice Number: 0448

I, McKendzie Castillo, being duly sworn on oath say that the Plainsman is a daily paper published at Huron, Beadle County South Dakota, and that said newspaper has a bona fide circulation of at least 250 copies daily; that said newspaper has been published within said county for fifty-two consecutive weeks immediately prior to this date, that said newspaper is printed in whole or in part, in an office maintained at said place of publication; that I am a Legal Advertising Coordinator of said newspaper and know that facts herein state. The annexed notice headed: SD ENVIRONMENTAL & NATURAL - NOTICE OF HEARING - HITCHCOCK AQUIFER, was published for one day, in said newspaper and not in any supplement of the said newspaper, the publication was on 9/9/20. That the full amount of the fee charged for the publishing \$ 27.09 insures to the benefit of the publisher of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whom so ever.

McKendzie Castillo

Subscribed and sworn to me before this date 9/22/20.

[Signature]

Notary Public, South Dakota

My Term Expires 03/11/2022

F. P. 09-09-20
**Notice of Hearing
Regarding Five-Year
Review to Determine
the Availability of
Unappropriated Water
in the Tulare Western
Spink Hitchcock
Aquifer**

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Questions regarding the hearing may be directed to Ron Duval, Water Rights Program at (605) 773-3352 or ron.duval@state.sd.us.

No. 0448 (adv.)
Published one time at
the total approximate
cost of \$27.09.

**First Report on the Five Year Review of Water Availability
Western Spink Hitchcock Management Unit of the Tulare Aquifer
September 17, 2020**

The Water Management Board deemed the Western Spink Hitchcock management unit of the Tulare aquifer as fully appropriated in 2013. In 2014, the South Dakota Legislature provided a process for administering fully appropriated aquifers by placing into law SDCL 46-2A-7 through 46-2A-7.7. These laws provide a process to 1.) notice a determination that a groundwater source is fully appropriated; 2.) accept and hold applications for future consideration; 3.) create a priority list for future appropriations if unappropriated water becomes available; and 4.) conduct a review at least once every five years to determine whether unappropriated water is available. At the time of this report, there are 28 applications to appropriate water on hold for this aquifer management unit and they total 72.79 cubic feet per second (cfs) for the irrigation of 5,374 acres. This report is an assessment of the availability of unappropriated water in the Western Spink Hitchcock management unit of the Tulare aquifer to satisfy the five-year review requirements for fully appropriated aquifers.

AQUIFER: Western Spink Hitchcock management unit of the Tulare aquifer (T:WSH)

HYDROGEOLOGY

The Tulare aquifer is a Quaternary aged system of interconnected sand and gravel layers that were deposited as outwash by meltwater from receding glaciers (Howells and Stephens, 1968). The Western Spink Hitchcock management unit of the Tulare aquifer is a buried aquifer generally lying immediately above the bedrock (basal) (Hedges et al., 1982). The glacial deposits that created the Tulare aquifer were deposited on top of an existing erosional surface that had exposed the Cretaceous aged Pierre Shale, Niobrara Formation, and in the buried deeply incised bedrock valleys, the Codell Sandstone member of the Carlisle Shale (Howells and Stephens, 1968). The areal extent of the Western Spink Hitchcock management unit has undergone several revisions and they are described in detail by Buhler (Buhler, 2012a). The current areal extent has been delineated as covering an area of 263,016 acres (Buhler, 2012a). Buhler (2013) later notes that this areal extent may have been optimistic. This review did not investigate revising the boundaries of the Tulare: Western Spink Hitchcock management unit, however, there have been over 100 additional test holes or wells drilled within the boundaries of the management unit since 2012 (Water Rights, 2020d).

Buhler's (2013) analysis determined that approximately 76,978 acres of the Tulare: Western Spink Hitchcock aquifer were under unconfined conditions in October 2012, and showed that at that time, the majority of the Tulare: Western Spink Hitchcock aquifer was under confined conditions. The static water level in the Tulare: Western Spink Hitchcock aquifer has ranged from 63 feet below ground surface to rising above ground surface (Water Rights, 2020b). The direction of groundwater flow in the Tulare: Western Spink Hitchcock management unit is generally from the west to the east, towards the James River.

South Dakota Codified Law 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed

use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest.

WATER AVAILABILITY

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.”

The availability of unappropriated water from the Tulare: Western Spink Hitchcock aquifer was last evaluated in 2013 and was based upon observation well data and through consideration of a hydrologic budget for the aquifer (Buhler, 2013). This report will reevaluate the availability of unappropriated water from the Tulare: Western Spink Hitchcock aquifer based upon additional years of observation well data and the development of a hydrologic budget for the aquifer.

Observation Well Data

In determining the availability of unappropriated water, South Dakota Administrative Rule 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge to the aquifer. The analysis of observation well data provides a means of assessing the aquifer and provides the best reasonably available information to evaluate the balance between withdrawals from and recharge to the Tulare: Western Spink Hitchcock aquifer.

The Water Rights Program monitors 50 observation wells completed in the Tulare: Western Spink Hitchcock aquifer (Water Rights, 2020b). Hydrographs for five of these observation wells are shown in Figures 2-6 and hydrographs for all 50 are included in Appendix B. The five selected hydrographs are representative of the Tulare: Western Spink Hitchcock aquifer and show that the aquifer readily responds to climatic conditions, with rising water levels during wet years and declining water levels during dry years.

The response of the aquifer as recorded by the observation well measurements can provide insight into the balance of withdrawals to recharge for an aquifer. If discharge (natural and from well withdrawals) from an aquifer is exceeding the recharge to an aquifer, a steady, continual decline of the water level or artesian pressure is expected. In observation wells that show the influence of well withdrawals, a seasonal decline should be observed followed by a return to the pre-pumping water level. If the withdrawals across the entirety of the aquifer are unevenly distributed, the configuration of the potentiometric surface may change to show the effect of these withdrawals. The effects of climate can mask some of these signals for how the aquifer responds to pumping.

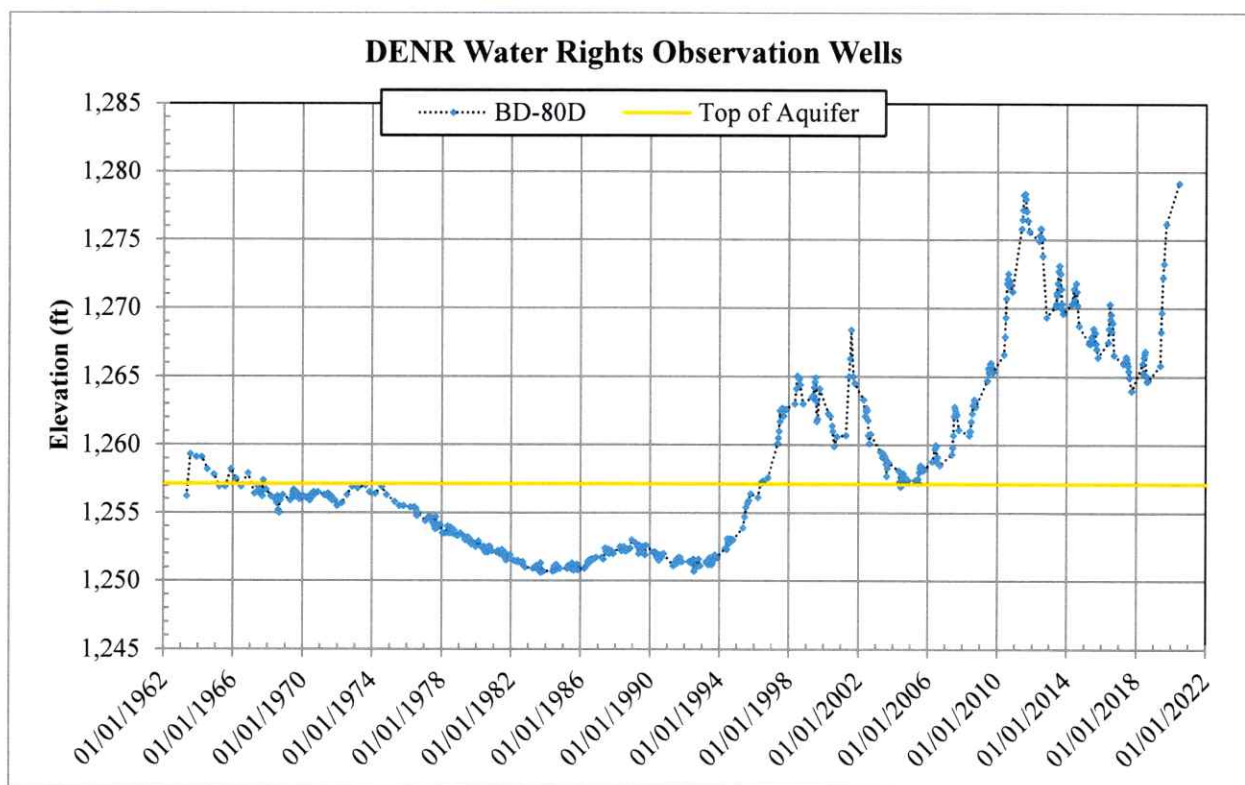


Figure 2. Hydrograph of DENR-Water Rights' observation well BD-80D (see Figure 1 for location). Ground surface elevation is approximately 1292 ft.

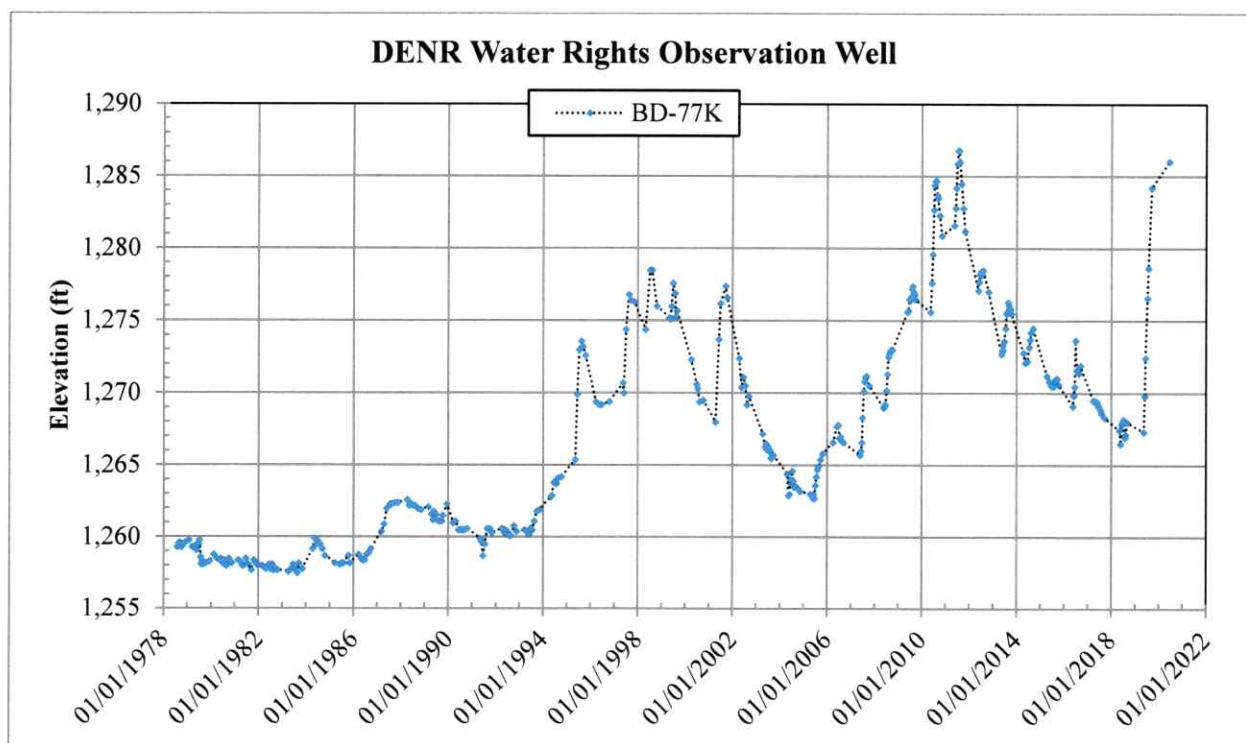


Figure 3. Hydrograph of DENR-Water Rights' observation well BD-77K (see Figure 1 for location). Top of aquifer elevation is approximately 1239 ft, ground surface elevation is approximately 1313 ft.

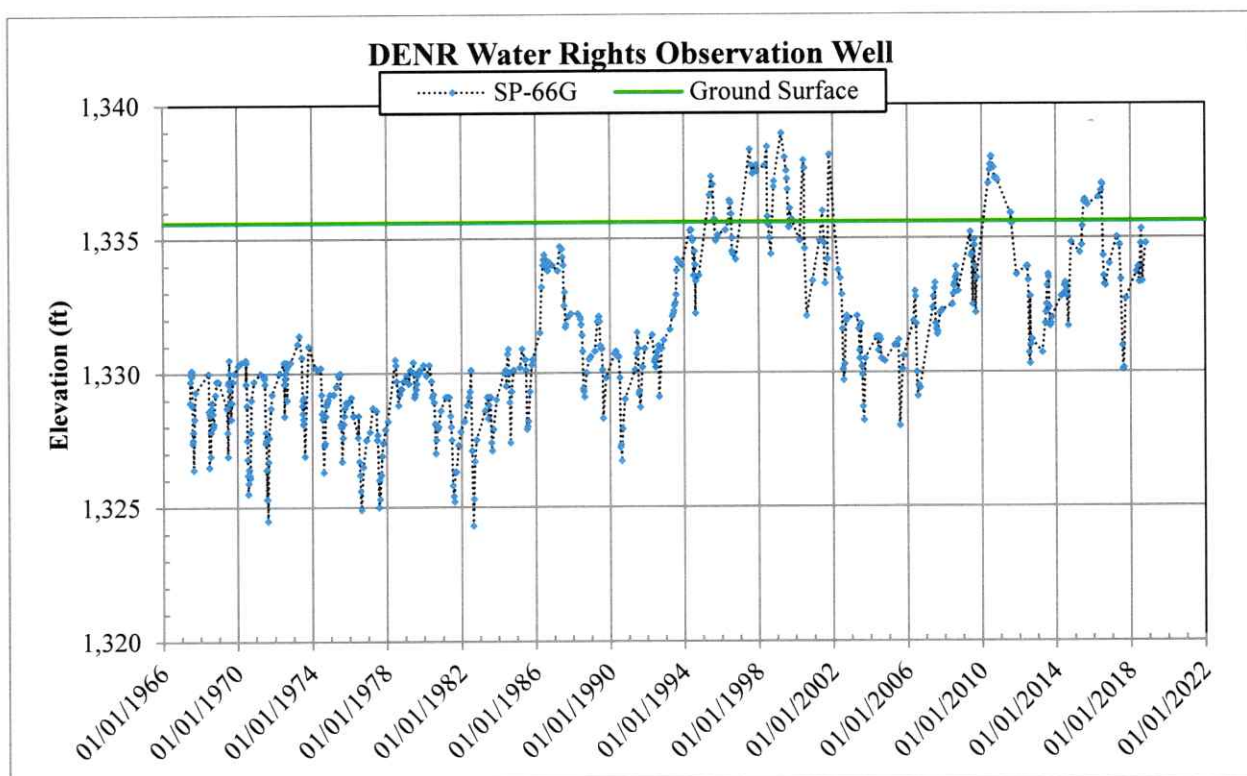


Figure 4. Hydrograph of DENR-Water Rights' observation well SP-66G (see Figure 1 for location). Top of aquifer elevation is approximately 1264 ft.

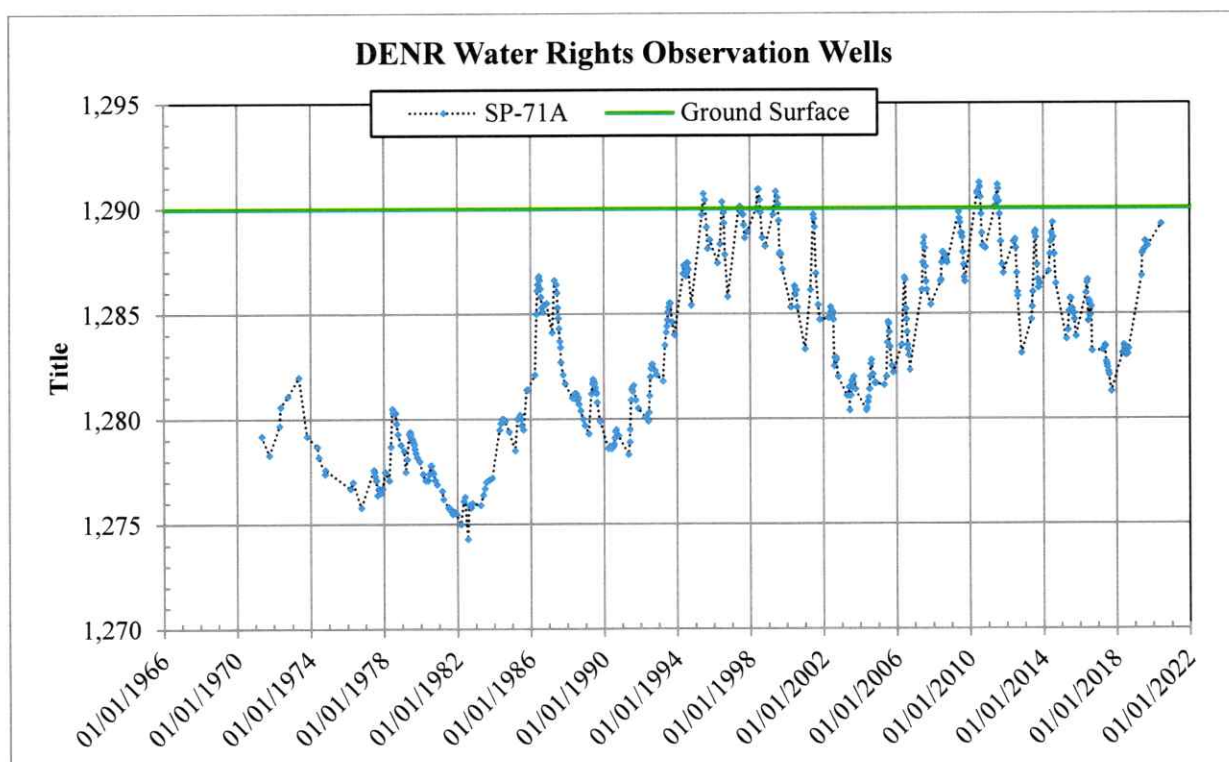


Figure 5. Hydrograph of DENR-Water Rights' observation well SP-71A (see Figure 1 for location). Top of aquifer elevation is approximately 1245 ft.

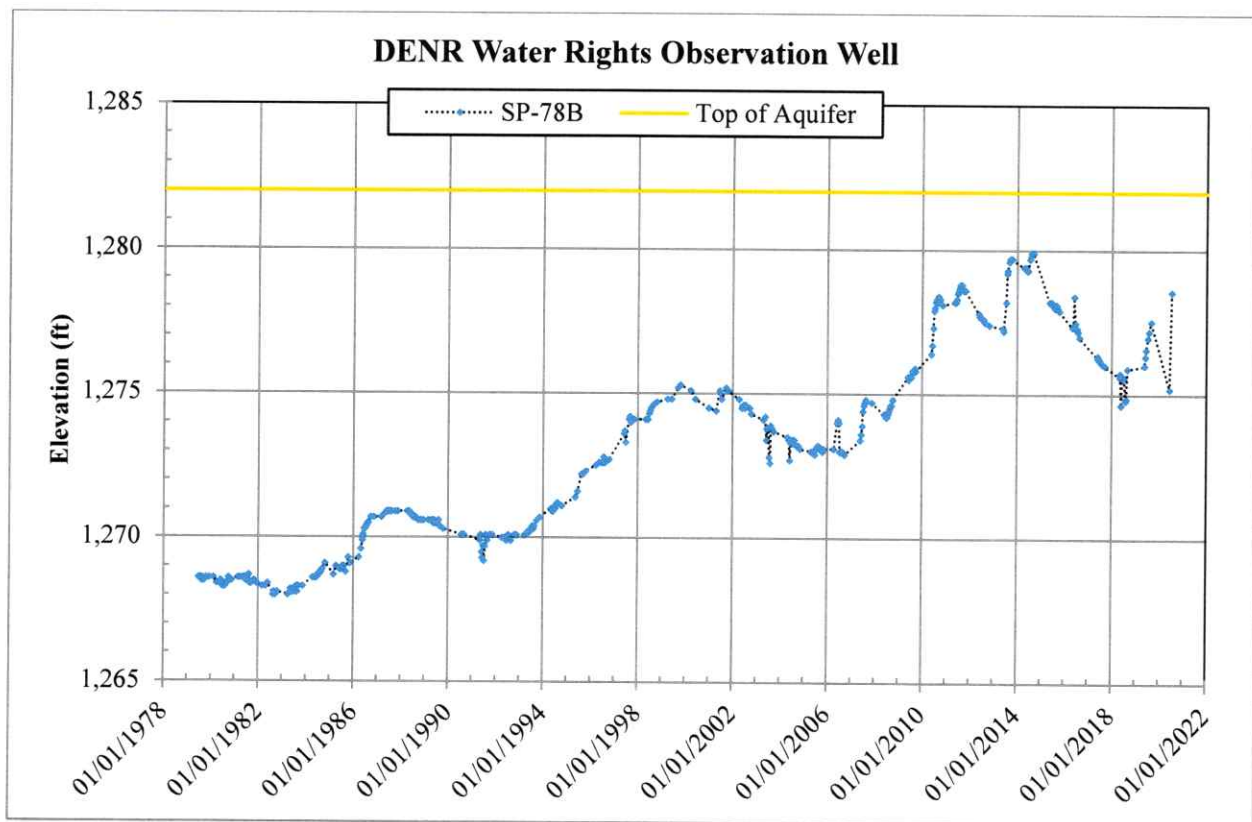


Figure 6. Hydrograph of DENR-Water Rights' observation well SP-78B (see Figure 1 for location). Ground surface elevation is approximately 1296 ft.

Observation well water level trends:

When the discharge (natural and from well withdrawals) exceeds the recharge of an aquifer, a declining water level is an indicator. Conversely, a rising water level in an aquifer is an indicator that the recharge is exceeding the discharge (natural and well withdrawals) of an aquifer. An equation for this relationship is:

$$\Delta S = R - D$$

Where: ΔS = change in the volume of water in storage in the aquifer

R= Recharge

D= Discharge

The observation well data for the Tulare: Western Spink Hitchcock aquifer has documented upward trending water levels throughout the aquifer (Water Rights, 2020b). The average slope of linear trend lines for the 48 observation well hydrographs from the initial measurement in 1983 up to the last measurement of 2019 has been +0.000571 feet per day (+0.209 feet per year). Observation well BD-80B was removed from this analysis due to the well having several periods of missing data and observation well BD-2016A was removed due to having a short period of record. Buhler's analysis (2013) refined the period of analysis to encompass January 2003 through October 2012 due to no additional appropriations being made over this time period. This time period did not account for the time it took for the appropriations approved in 2002 to place water to beneficial use. All permitted and licensed water rights had placed water to beneficial use starting with the 2008 irrigation season. Analysis of the observation wells over the January 2003 through October 2012 period found the average slope of the linear trend line for

the 48 observation well hydrographs to be +0.003607 feet per day (+1.317 feet per year). Including the time prior to Buhler's analysis, 1983 through October 2012, the average slope of the linear trend line for the 48 observation well hydrographs was found to be +0.000751 feet per day (+0.274 feet per year). In the time since Buhler's analysis up to the end of 2019 (November 2012 through 2019), the average slope of the linear trend line for the 48 observation well hydrographs has been -0.001187 feet per day (-0.433 feet per year). This type of analysis does not account for any errors introduced by including data from observation wells that are influenced by well withdrawals and the year to year variability of those withdrawals or an observation well changing between unconfined and confined behaviors. Observation wells that are under unconfined conditions show the change in storage within the aquifer, while observation wells that are under confined conditions show the change in hydrostatic pressure.

Over the period of record, the upward trend of the water levels indicates recharge to the Tulare: Western Spink Hitchcock aquifer has been greater than the total of the discharges from the aquifer. However, given the decrease in the average slope of the linear trend line since Buhler's analysis (November 2012-end of 2019), consideration of appropriations that have started placing water to beneficial use since November 2012, and the decrease in the long term average slope from the period of 1983 through October 2012 (+0.274 feet per year) to the period of 1983 through 2019 (+0.209 feet per year), the observation well water level trend is indicating that discharge may have exceeded the recharge of the aquifer over the November 2012 through 2019 time period.

Quantifying the change in volume of water stored in the Tulare: Western Spink Hitchcock aquifer is possible through analysis of observation wells that have remained unconfined throughout their period of record. The response of the aquifer when an observation well is under confined conditions is only reflective of the head pressure at that location and does not directly show changes in the volume of water in the aquifer. The hydrograph for observation well BD-80D as shown in Figure 2, visually shows how the observed water level changes between unconfined and confined conditions. The aquifer at observation well BD-80D was under unconfined conditions between 1966 and 1996, and then transitioned to confined conditions when the water level started rising above the top of the aquifer in 1997.

Continuing the methodology used by Buhler (2013), the same five observation wells were used to analyze the Tulare: Western Spink Hitchcock aquifer. These wells were chosen by Buhler because they are located in portions of the aquifer that remained unconfined for their entire period of record and the wells were determined to accurately reflect aquifer conditions. The time period used for this updated analysis was 1983-2019 to allow each observation well to have the same number of water years on record. The water year runs from October 1st through September 30th and the values used in this analysis are interpolated values for October 1st that were obtained using the two adjacent readings on the observation well hydrograph, unless a reading was recorded on October 1st. For example, the 1983 water year water level change is the interpolated Oct. 1, 1983 reading minus the interpolated Oct. 1, 1982 reading. The results of the analysis are shown in Table 1.

Buhler (2012a) analyzed the average annual water level change from 1983-2011. Buhler's (2012a) analysis showed an increase in average annual water level of 0.34 feet per year. However, Buhler's 2012 analysis and his subsequent 2013 analysis omitted the last month for

water year 2011 by only factoring in observation well readings from October 2010 through August 2011. The following water year, water year 2012, was calculated correctly from October 1, 2011 to October 1, 2012. The consequence of omitting September 2011 in these calculations is that there are unaccounted for drops in the observation well hydrographs of 3.5 feet for SP-79F, 0.2 ft for SP-78B, 1.2 ft for SP-80B, 1.1 ft for SP-82E, and 1.2 ft for SP-82G. Including September 2011 in the calculations for the annual water level change for 2011 reduces the average annual water level change in Buhler's 2012 analysis from 0.34 feet per year to 0.30 feet per year and for Buhler's 2013 analysis from 0.3152 feet per year to 0.21 feet per year. Buhler's 2013 analysis determined that by using the 0.3152 feet per year of average annual water level change over an unconfined area of 76,978 acres, the recharge exceeded the discharge by an average of 3,640 acre-feet per year. The availability of 3,640 acre-feet per year of unappropriated water applied at an application rate of 9.32 inches would allow the irrigation of 4,686 acres (Buhler, 2013). The Water Management Board approved permits authorizing the irrigation of 4,706 acres. If water year 2011 had included the observation well readings of September 2011, the amount of unappropriated water available would have been reduced by 1,215 acre-feet per year, to 2,425 acre-feet per year. This volume of unappropriated water would have only allowed the irrigation of an additional 3,122 acres, a reduction of 1,564 acres from Buhler's analysis (Buhler, 2013).

In the time since Buhler's report (2013), the average annual water level change has been an increase of 0.47 feet per year (2013-2019), resulting in the long-term average annual water level change being raised from +0.22 feet per year (1983-2012) to + 0.27 feet per year from 1983 to 2019. Given the short period of time since the last appropriations were approved in 2013, anomalously wet or dry years can skew the analysis of short time periods. One such anomalous year is the wet year of 2019, as evidenced in Table 2 by having the smallest amount of reported irrigation, the fewest irrigated acres, and the lowest application rate over the period of record. Excluding the anomalously wet year of 2019, the period of 2013-2018 saw a decrease of 0.02 feet per year, and the long-term period of 1983-2018 saw the average annual water level change lowered to +0.18 feet per year.

This method of estimating a volume of water is approximate as the unconfined area of the aquifer is not static and changes as the elevation of the water changes. This method also assumes that all variables relating to the use of the water are static and does not take into consideration any recent changes that would affect the use of water going into the future. Over the period of record, the observation well data indicates that the average annual recharge to the aquifer has exceeded the average annual discharge from the aquifer. This increase in annual water level change prior to Buhler's report was accounted for in Buhler's report (2013) and appropriations resulting from the report. In the time since Buhler's report and excluding the anomalously wet year of 2019 (2013-2018), the observation well data indicates that the average annual recharge to the aquifer has been nearly adequate to supply the average annual discharge from the aquifer with an average decline of 0.02 feet per year. This small decline, coupled with the time it took for approved appropriations to place their water to beneficial use (Table 5), suggests that additional data from future years is needed to determine if the appropriations made in 2013 from the Tulare: Western Spink Hitchcock aquifer brought the aquifer up to being fully appropriated. Based upon the existing data, the observation well analysis does not show that unappropriated water is available from the Tulare: Western Spink Hitchcock aquifer.

Table 1. Water Level change in feet by water year for select unconfined observation wells with averages calculated for specific time periods (Water Rights, 2020b)

Water Year	SP-79F	SP-78B	SP-80B	SP-82E	SP-82G	Average
1983	0.60	0.26	0.24	0.81	-0.42	0.30
1984	0.98	0.70	0.65	1.01	0.36	0.74
1985	0.73	0.13	0.31	0.10	-0.14	0.23
1986	1.76	1.57	2.14	4.80	1.94	2.44
1987	-2.96	0.20	0.41	-3.69	0.12	-1.18
1988	-0.63	-0.30	-0.41	-1.20	-0.74	-0.66
1989	0.25	-0.28	-0.18	-0.23	-0.33	-0.16
1990	0.40	-0.24	-0.42	0.53	-0.59	-0.06
1991	0.27	0.03	0.10	0.20	0.13	0.15
1992	0.38	-0.05	-0.08	1.62	0.13	0.40
1993	1.50	0.56	0.69	1.46	0.47	0.94
1994	-0.29	0.51	0.79	0.62	0.94	0.51
1995	1.40	1.14	1.76	1.31	3.44	1.81
1996	-1.56	0.42	0.84	-2.31	0.03	-0.52
1997	1.64	1.35	1.94	3.15	3.66	2.35
1998	1.14	0.62	0.80	-0.20	-0.15	0.44
1999	-2.06	0.60	0.45	-1.98	-1.34	-0.87
2000	-1.92	-0.64	-2.29	-1.82	-2.50	-1.84
2001	1.64	0.53	1.70	0.76	1.09	1.14
2002	-1.90	-0.76	-1.76	-1.85	-1.97	-1.65
2003	-0.40	-0.70	-1.14	-0.82	-0.90	-0.79
2004	0.68	-0.49	-0.75	0.50	-0.66	-0.15
2005	-0.14	-0.14	0.22	1.48	0.32	0.35
2006	0.13	-0.13	0.01	-1.25	0.45	-0.16
2007	1.69	1.83	2.26	2.85	2.07	2.14
2008	0.49	0.05	0.38	1.09	1.13	0.63
2009	0.35	1.03	0.99	-0.10	0.67	0.59
2010	0.90	2.46	1.67	0.48	1.42	1.38
2011	0.32	0.32	1.03	-0.69	-0.70	0.05
2012	-2.71	-1.17	-2.34	-1.75	-1.87	-1.97
2013	3.69	2.27	2.69	5.61	2.98	3.45
2014	-3.56	0.00	-1.41	-3.96	-1.35	-2.06
2015	-0.65	-1.75	-0.91	-0.01	-1.35	-0.93
2016	-0.40	-1.08	-0.51	-1.36	-0.80	-0.83
2017	-0.17	-0.89	-1.25	-0.65	-0.87	-0.77
2018	1.65	-0.06	0.36	1.70	1.31	0.99
2019	2.59	1.32	4.90	3.74	4.72	3.45
<i>Average from 1983-2019, period of record</i>	0.16	0.25	0.37	0.27	0.29	0.27
<i>Average from 1983-2011, time period of Buhler (2012a)</i>	0.19	0.36	0.43	0.23	0.27	0.30
<i>Average from 1983-2012</i>	0.09	0.31	0.33	0.16	0.20	0.22
<i>Average from 1983-2018</i>	0.09	0.22	0.25	0.17	0.17	0.18
<i>Average from 2003-2012, time period of Buhler (2013)</i>	0.13	0.30	0.23	0.18	0.19	0.21
<i>Average from 2003-2018, time period of Buhler (2013) through 2018</i>	0.12	0.10	0.08	0.19	0.12	0.12
<i>Average from 2003-2019</i>	0.26	0.17	0.36	0.40	0.39	0.32
<i>Average from 2012-2018, time period since Buhler (2012a)</i>	-0.31	-0.38	-0.48	-0.06	-0.28	-0.30
<i>Average from 2012-2019</i>	0.06	-0.17	0.19	0.42	0.35	0.17
<i>Average from 2013-2018, time period since Buhler (2013)</i>	0.09	-0.25	-0.17	0.22	-0.01	-0.02
<i>Average from 2013-2019</i>	0.45	-0.03	0.55	0.72	0.66	0.47

Potentiometric Surface:

The potentiometric surface of an aquifer is a snapshot of the water level in the aquifer at a selected time. The potentiometric surface will show higher water levels as a result of wetter periods of time and lower water levels during drier times and/or increased periods of withdrawals. An analysis of the potentiometric surface does not provide a clear indication of whether there is unappropriated water available or how much may be available. The potentiometric surface data can show whether there are significant stressors on the aquifer, in other words, if the recharge is able to keep up with the withdrawals from the aquifer. These stressors would show up as a significant change in the general shape/configuration of the potentiometric surface. If there are areas of the aquifer that are showing signs of stress, it is an indicator that the aquifer is over-appropriated. The stressors may be caused by very significant increases in withdrawals in an area over a short period of time, or may be more subtle, such as a slight increase in the withdrawals that cumulatively over the course of 10, 15, 20 years exceed the recharge to the local area. The potentiometric surface of the aquifer would be able to show these stressors because the area that is being stressed is creating a steeper hill for the groundwater to flow down.

The potentiometric surface of the Tulare: Western Spink Hitchcock aquifer was estimated from observation well data for three time periods (Magstadt, 2020). These time periods are May 1988, May 2013, and June 2020. These dates were chosen for comparison of the configuration of the potentiometric surface with the potentiometric surfaces calculated by Buhler (2013). Maps showing the contour lines for these potentiometric surfaces are shown in Figures 6-8.

The potentiometric surface contours shown in Figure 6 show that water levels were generally lower in May 1988 than they were in May 2013. The potentiometric surface contours also show that the water levels were similar in May 2013 and June 2020. The potentiometric surface contour lines generally follow the same shapes for all three dates, indicating that the configuration of the potentiometric surface has not changed significantly over time. The configuration of the potentiometric surface of the aquifer over time is showing that the well withdrawals have not been affecting the general direction of groundwater flow, indicating that the aquifer has not been significantly stressed by withdrawals. The pre-development configuration of the potentiometric surface is unknown.

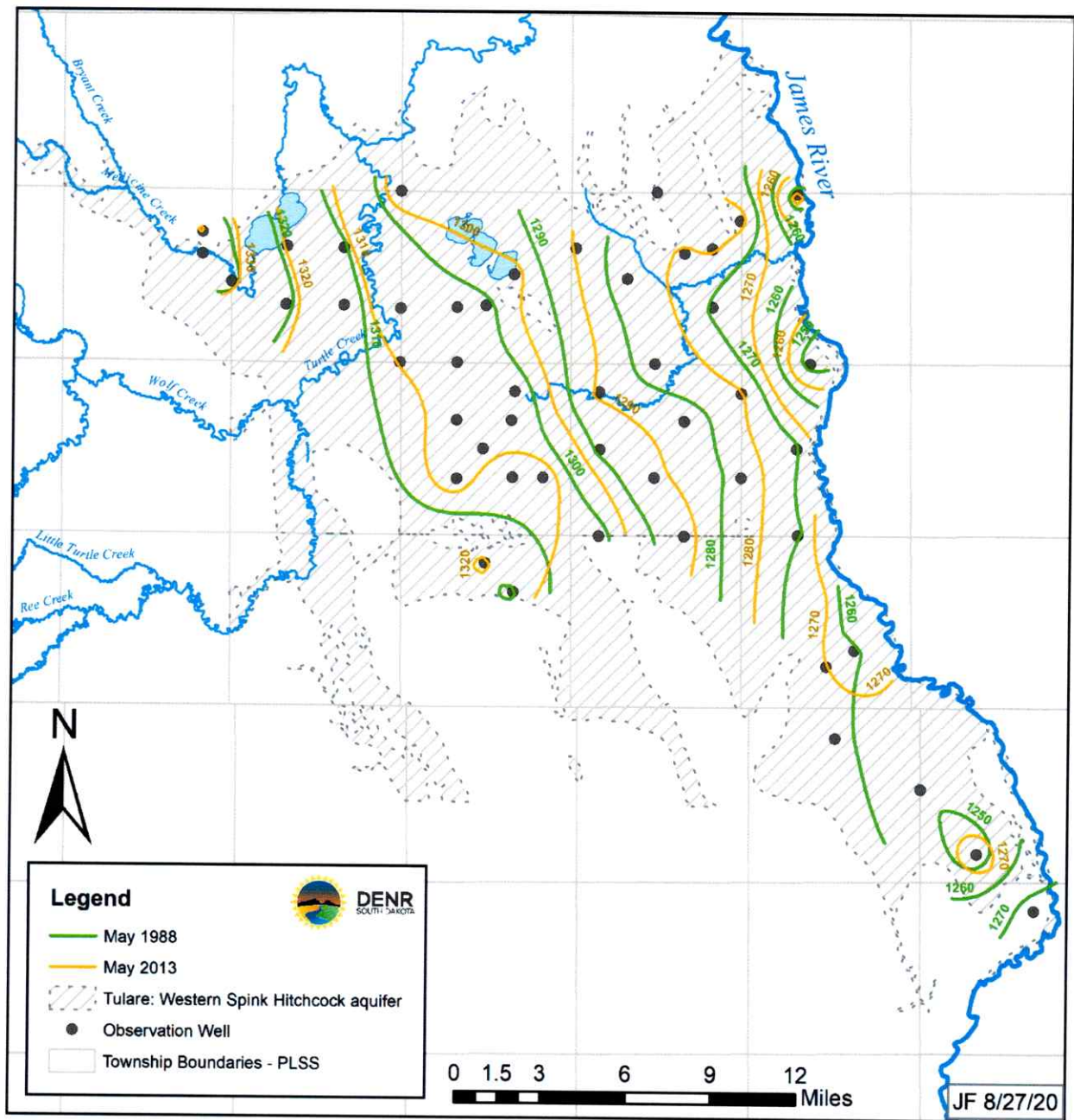


Figure 6. Potentiometric surface contours of the Tulare: Western Spink Hitchcock aquifer for May 1988 (Green) and May 2013 (Yellow)

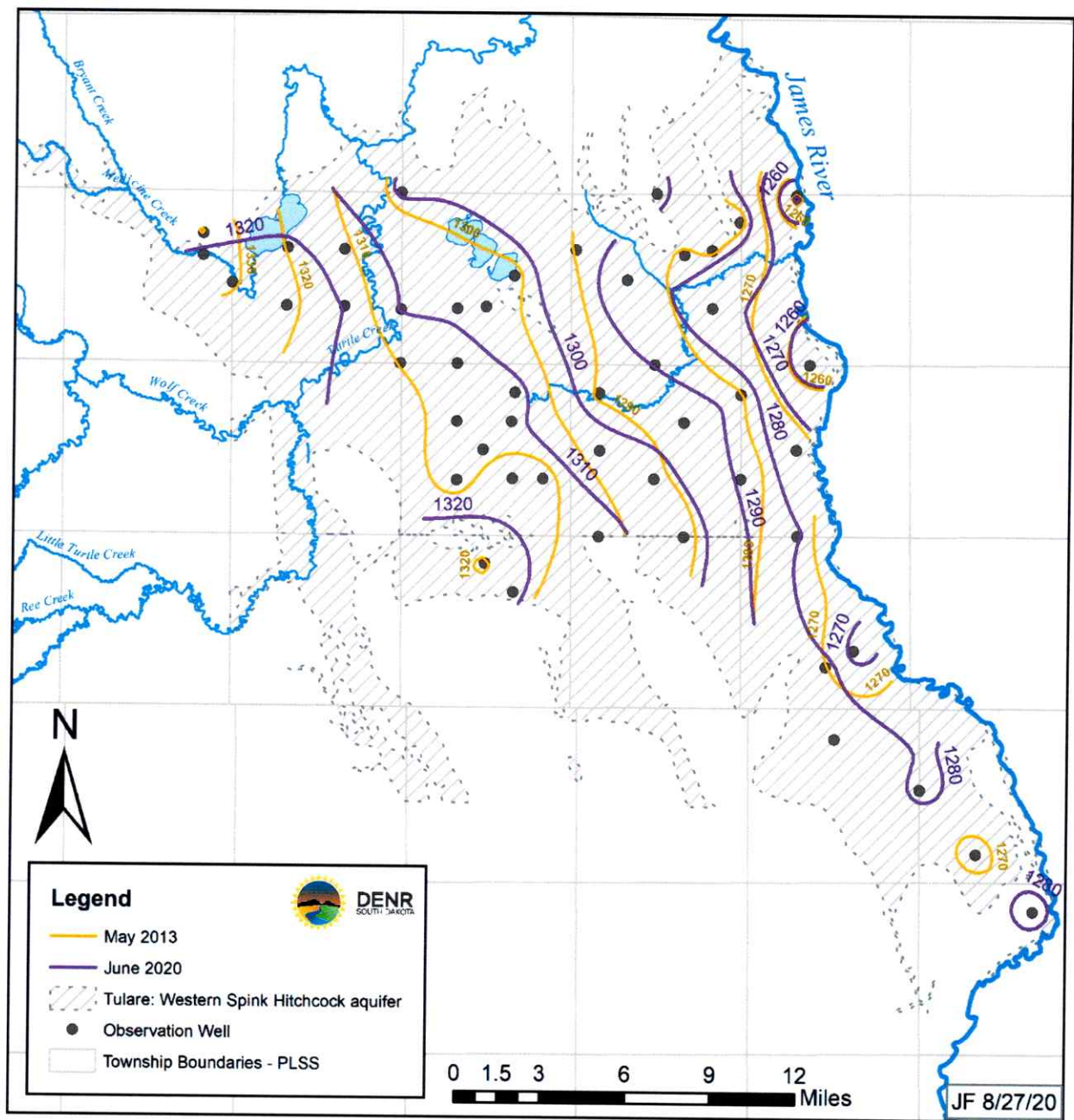


Figure 7. Potentiometric surface contours of the Tulare: Western Spink Hitchcock aquifer for May 2013 (Yellow) and June 2020 (Purple)

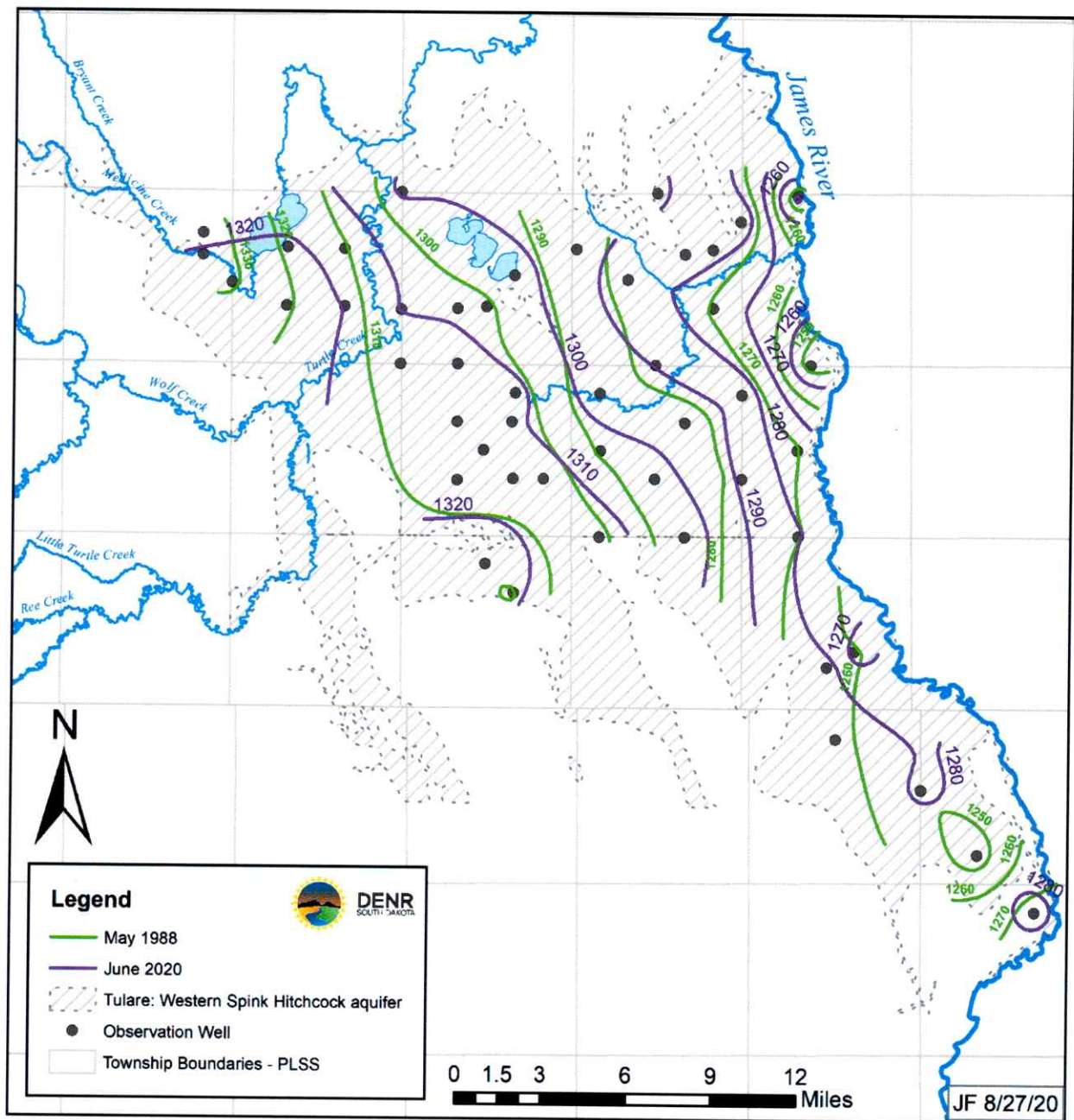


Figure 8. Potentiometric surface contours of the Tulare: Western Spink Hitchcock aquifer for May 1988 (Green) and June 2020 (Purple)

The observation well analysis provides a quantitative analysis based upon measured observations of the aquifer for the determination of the availability of unappropriated water. The annual water level change for the period of 2012-2018 shows that the water level has declined 0.02 feet per year on average. The increase in the annual water level change over the period of 1983-2011 was already accounted for in appropriations made in 2011 and 2012. The observation well analysis does not show that unappropriated water is available from the Tulare: Western Spink Hitchcock aquifer

Hydrologic Budget

Recharge

Recharge to the Tulare: Western Spink Hitchcock aquifer occurs primarily through infiltration of precipitation where the aquifer is at or near the surface. Recharge from precipitation varies by season, by year, and by location (Hamilton and Howells, 1996). Recharge could also occur from rivers and streams if they are hydraulically connected to the aquifer and if the potentiometric surface of the aquifer was lower than the stage of streams and rivers.

Recharge Estimates:

Previous Estimates:

Recharge to the Tulare: Western Spink Hitchcock has been estimated through a variety of methods. Prior to 2002 the Western Spink and Hitchcock management units were considered separately, and the recharge studies may account for one or both management units. Hedges et al. (1985) used data from 17 observation wells to determine the recharge rate to the unconfined portion of the Tulare: Hitchcock is 2.0 inches per year. A regional flow-net analysis of the Tulare: Hitchcock aquifer was also performed by Hedges et al. (1985) and found the estimated recharge rate to the aquifer was 0.24 inches per year. It is unknown what the confined and unconfined areas were for these analyses.

A numerical groundwater flow model (Kuiper, 1984) estimated that the average recharge rate to the Tulare: Western Spink Hitchcock is 0.83 inches per year. Applying the estimated average recharge rate of 0.83 inches across the 527 square miles (337,280 acres) of the model, results in an estimated average annual recharge rate of 23,000 acre-feet per year (Kuiper, 1984). This model used cells that measured 1 mile by 1 mile and compared the response of the aquifer in the model to observation well data from 1968 to 1978 and irrigation questionnaire data from 1978. Estimated recharge in the model was varied throughout the model domain, including 37 square miles around Twin and Mud lakes where the recharge to the aquifer was estimated as being higher than the rest of the model. The model domain did include Beadle, Hand, and Spink Counties and 13 square miles along the James River were included in both model areas A (Tulare: Western Spink Hitchcock) and B (Tulare: East James).

In previous Water Management Board decisions, the Water Management Board has relied upon the 0.83 inches of recharge per year from Kuiper's (1984) results. This recharge rate has been applied over the entirety of Tulare: Western Spink Hitchcock aquifer (263,016 acres), resulting in an estimated average annual recharge of 18,192 acre-feet per year (Buhler, 2012a). There are differences between the modeled area and the area currently delineated as the Tulare: Western Spink Hitchcock aquifer, it is unknown if the modeled recharge rate is reflective of the current area of the aquifer. The boundaries that were used in the development of the model are mostly

consistent with the currently accepted boundaries of the Tulare: Western Spink Hitchcock aquifer, however there are several areas where the model extends the aquifer boundaries to the north and south. The difference in area between Kuiper's model (1984) and Buhler's delineation (2012a) is approximately 74,264 acres (~116 square miles). Most of this extra area, the area not included in Buhler's (2012a) delineation, in Kuiper's model was estimated as having an average recharge rate of 0.8 inches per year, and approximately 1 square mile was estimated as having an average recharge rate of 1.2 inches per year. A simple subtraction of the extra cells from Kuiper's model does not affect the estimated average recharge rate of 0.83 inches per year. It is not clear if a reduction in the area of the model would have affected the estimated recharge rates that Kuiper found to be a best fit for the model area. As part of the modeling process, Kuiper was able to adjust the estimated recharge rate for each cell in order to best fit the model output to the observed water levels in the observation wells that data was available for. As each cell in the model had several input values, changing the extent of the model and adding or removing cells would result in the adjustment of values in other cells to best fit the model output to the observed water elevation data. To account for a change in the model extent, it is unknown if the estimated average recharge rate would increase, stay the same, or decrease.

Buhler (2013) performed a simple regional flow net analysis. This analysis was used to confirm the reasonableness of the average annual recharge estimate from Kuiper (1984). This simple regional flow net analysis is only applicable to the year 2012 and does not provide an estimated average annual recharge rate. The simple regional flow net analysis estimated the recharge rate for 2012 was 0.39 inches per year and showed that Kuiper's average annual recharge estimate was reasonable (Buhler, 2013).

Given the uncertainty involved with applying Kuiper's estimated average annual recharge to the current extent of the Tulare: Western Spink Hitchcock aquifer, it is difficult to determine the estimated average annual recharge to aquifer. The 18,192 acre-feet of recharge per year as calculated by Buhler (2012a) is the best information reasonably available for quantifying the estimated average annual recharge to the Tulare: Western Spink Hitchcock aquifer.

Discharge

Discharge from the Tulare: Western Spink Hitchcock aquifer occurs through well withdrawals, evapotranspiration from areas where the aquifer is near the land surface, outflow to the James River, and possible outflow to other surface waters.

Domestic water use:

There are currently 216 domestic water supply wells on file with the DENR-Water Rights Program that appear to be completed into the Tulare: Western Spink Hitchcock aquifer (Water Rights, 2020d). The volume of water used by domestic wells has not been estimated previously for this management unit, however the use can be estimated using the average rural use for the rural water system in the area as done for the Tulare: East James aquifer (Buhler, 2012b). The 2012 estimated domestic use was 7,000 gallons per tap per month, which equates to an estimated average annual use from domestic wells of 56 acre-feet per year. The actual quantity of water these domestic wells withdraw is unknown; this is the best available and reasonable estimate of domestic water use from the Tulare: Western Spink Hitchcock aquifer.

Appropriative water use:

As of June 17, 2020, there is a total of 159 Licensed or Permitted Water Rights appropriating water from the Tulare: Western Spink Hitchcock aquifer (Water Rights, 2020c). The appropriative water use from the Tulare: Western Spink Hitchcock aquifer is entirely for the irrigation of crops, except for two water rights for commercial use. The total diversion rate for the two commercial use water rights is 0.134 cubic feet per second (60 gallons per minute). If these two water rights were to pump 60% of the year at their maximum diversion rate, they would withdraw 58.1 acre-feet from the aquifer. The estimate of 60% pumping time is commonly used by the Water Rights Program and has been previously accepted by the Water Management Board (Water Rights, 2020c). The remaining 157 water rights are for irrigation. Figure 9 shows how the number of acres authorized for irrigation at the start of each irrigation season (April 1) has changed from 1979 to 2020 and the reported irrigation data for 1979 and 1983 through 2019. The irrigation questionnaires from 1980 through 1982 could not be located, so those years were not included in any calculations. Authorized acres are the acres approved to be irrigated under an existing water right, and the status of the water right could be permitted or licensed. Irrigated acres are the acres indicated as irrigated on the irrigation questionnaire by the irrigator. The annual irrigation summaries have the reported use for the 1980-1982 time period, however the number of acres that were irrigated are not included on the summaries, and it is impossible to investigate any anomalous data.

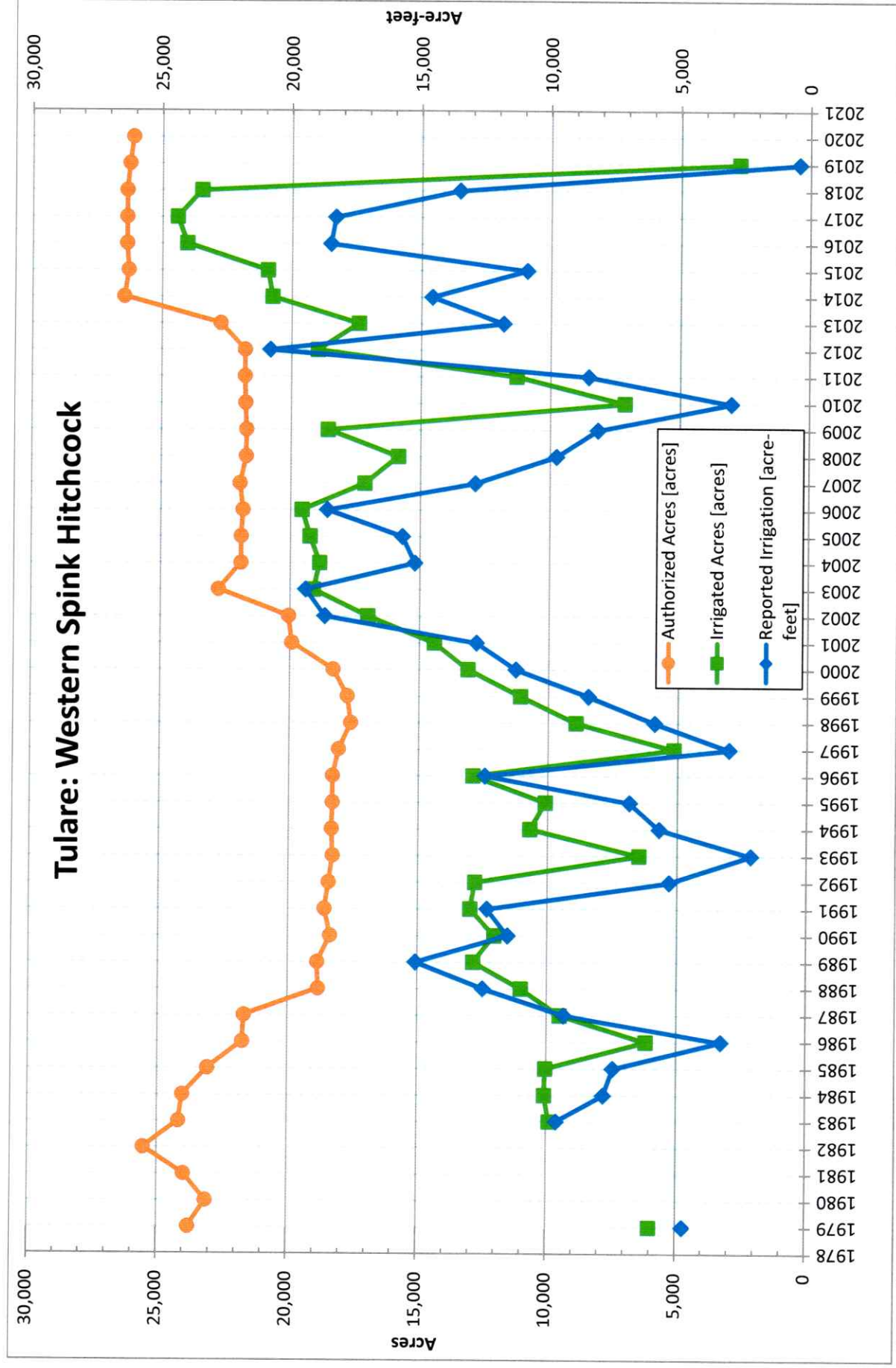


Figure 9. Acres authorized for Irrigation, Irrigated Acres and Reported Irrigation from the Tulare: Western Spink Hitchcock aquifer (Water Rights, 2020c)

Table 2. Irrigation development from the Tulare: Western Spink Hitchcock aquifer (* data not available), (modified from Buhler, 2012a; Mathiowetz, 2012; Water Rights, 2020a; Water Rights, 2020c)

Year	Permits with Acres	Authorized Acres [acres]	Irrigated Acres [acres]	Utilization Rate (Irrigated Acres/Authorized Acres Percentage)	Reported Irrigation [acre-feet]	Average Application Rate for Irrigated Acres [inches]
1979	132	23,781.00	6,018.00	25.31	4,728.50	9.43
1980	132	23,103.00	*	*	*	*
1981	138	23,955.00	*	*	*	*
1982	149	25,513.00	*	*	*	*
1983	144	24,154.00	9,883.00	40.92	9,611.81	11.67
1984	144	24,006.00	10,067.50	41.94	7,785.91	9.28
1985	138	23,047.10	10,033.50	43.53	7,419.24	8.87
1986	135	21,716.30	6,164.00	28.38	3,264.98	6.36
1987	134	21,659.60	9,487.00	43.80	9,329.14	11.80
1988	121	18,817.60	10,997.00	58.44	12,462.92	13.60
1989	119	18,851.60	12,842.20	68.12	15,061.79	14.07
1990	115	18,367.70	12,024.20	65.46	11,509.49	11.49
1991	115	18,589.60	12,972.80	69.79	12,307.90	11.38
1992	115	18,428.60	12,791.50	69.41	5,291.67	4.96
1993	116	18,279.60	6,728.00	36.81	2,200.30	3.92
1994	115	18,329.60	10,671.00	58.22	5,684.41	6.39
1995	112	18,303.60	10,085.00	55.10	6,833.56	8.13
1996	113	18,303.60	12,891.00	70.43	12,422.89	11.56
1997	110	18,076.60	5,136.00	28.41	3,005.00	7.02
1998	109	17,619.60	8,916.00	50.60	5,878.45	7.91
1999	110	17,755.60	11,068.90	62.34	8,444.64	9.15
2000	114	18,307.60	13,107.10	71.59	11,250.15	10.30
2001	126	19,905.60	13,287.00	66.75	12,786.81	11.55
2002	126	20,037.60	16,995.57	84.82	18,649.47	13.17
2003	138	22,745.00	19,103.77	83.99	19,397.25	12.18
2004	132	21,886.30	18,860.77	86.18	15,185.22	9.66
2005	132	21,886.30	19,240.26	87.91	15,669.49	9.77
2006	132	21,821.30	19,546.26	89.57	18,572.88	11.40
2007	133	21,943.30	17,145.50	78.14	12,878.64	9.01
2008	135	21,709.30	15,849.66	73.01	9,748.11	7.38
2009	132	21,697.90	17,169.60	79.13	8,143.49	5.69
2010	133	21,742.90	7,118.40	32.74	3,007.90	5.07
2011	133	21,771.90	11,300.50	51.90	8,512.07	9.04
2012	133	21,771.90	18,969.00	87.13	20,808.37	13.16
2013	139	22,717.90	17,399.20	76.59	11,811.93	8.15
2014	163	26,429.90	20,735.30	78.45	14,570.73	8.43
2015	161	26,277.90	20,917.70	79.60	10,910.11	6.26
2016	162	26,336.90	24,028.50	91.24	18,496.81	9.24
2017	163	26,335.90	24,404.00	92.66	18,305.35	9.00
2018	163	26,335.90	23,467.70	89.11	13,519.08	6.91
2019	162	26,234.90	2,732.40	10.42	421.52	1.85
2020	159	26,104.90	*	*	*	*
MAX.		26,429.90	24,404.00	92.66	20,808.37	14.07
MIN.		17,619.60	2,732.40	10.42	421.52	1.85
AVE.		21,672.06	13,688.28	63.37	10,681.26	9.06

Using the available reported pumping data from 1979 through 2019, the estimated annual domestic use, and the estimated commercial use, the total well withdrawal from the aquifer is expected to average less than 10,800 acre-feet/year. This total withdrawal from the Tulare: Western Spink Hitchcock aquifer due to pumping is around 0.89% of the estimated recoverable water in storage in the aquifer (10,800 acre-feet pumped per year versus 1,212,330+ acre-feet of recoverable water in storage (Hedges et al., 1982)).

In light of the considerable development that occurred as a result of appropriations made in 2012 and 2013, it is no longer appropriate to consider the entire period of record for determining the estimated average annual withdrawals. Table 3 shows the averages of Table 2 for many different periods of time to include data for comparison from previous reports and methodologies, the effect of a dry year (2012) and the effect of a very wet year (2019). The time periods that have the break between the years of 1979 and 1983 are effectively continuous time periods for all columns, except for the average authorized acres, as demonstrated in the first two rows of data.

Table 3. Averages of data in Table 2 for select time periods.

Period	Average Authorized Acres [acres]	Average Irrigated Acres [acres]	Average Utilization Rate	Average Reported Irrigation [acre-feet]	Average Application Rate for Irrigated Acres [inches]
1979-2019	21,672.06	13,688.28	63.37	10,681.26	9.06
1979, 1983-2019	21,473.25	13,688.28	63.37	10,681.26	9.06
1979-2011	20,791.31	12,250.03	60.09	9,901.47	9.38
1979, 1983-2012	20,494.01	12,466.77	60.96	10,253.30	9.50
1979, 1983-2018	21,344.56	13,984.39	64.80	10,958.55	9.25
2003-2011	21,911.58	16,148.30	73.62	12,346.12	8.80
2003-2018	23,338.16	18,453.51	78.58	13,721.09	8.77
2003-2019	23,508.55	17,528.74	74.57	12,938.76	8.37
2012-2018	25,172.33	21,417.34	84.97	15,488.91	8.74
2012-2019	25,305.15	19,081.73	75.65	13,605.49	7.88
2013-2018	25,739.07	21,825.40	84.61	14,602.34	8.00
2013-2019	25,809.90	19,097.83	74.01	12,576.50	7.12
2014-2018	26,343.30	22,710.64	86.21	15,160.42	7.97
2014-2019	26,325.23	19,380.93	73.58	12,703.93	6.95
2015-2018	26,321.65	23,204.48	88.15	15,307.84	7.85
2015-2019	26,304.30	19,110.06	72.61	12,330.57	6.65

Examination of the average application rate for the time period of Buhler's (2013) report, 1979-2011, shows that the average application rate has been adjusted slightly from Buhler's calculated 9.32 inches to 9.38 inches. This is due to corrections of the underlying water right and irrigation questionnaire data, either from data entry errors, missing irrigation questionnaire data that was not included in Buhler's (2012a) dataset, and resolving instances where the irrigator submitted

data for multiple permits and some values were double counted or not counted at all. The application rate could still change slightly due to corrections in the water right data, locating missing irrigation questionnaire files, identifying when systems were constructed, considering suspensions, and upon further review of the irrigation questionnaires that cover several pivots and/or have been amended, incorporated, or reissued.

In the time since Buhler's report (2012a), the average application rate has varied due to climatic conditions. The time period of 2012-2018 has an average application rate of 8.74 inches, but with the wet year of 2019, the average application rate dropped to 7.88 inches for the time period of 2012-2019. The year of 2012 was dry and saw a high average application rate, the effect of this can be seen by comparing the average application rates between the time periods of 1979-2011 and 1979, 1983-2012; 2012-2018 and 2013-2018; and 2012-2019 and 2013-2019. For the entire period of record, 1979 through 2019, the average application rate has been 9.06 inches.

In Buhler's (2012a) report, the average annual withdrawals were calculated by averaging the irrigation questionnaire summary reports for the years 1979-2011 and adding the estimated domestic use. Table 4 shows the data from the irrigation questionnaire summary reports. The data from the irrigation questionnaire summary reports is currently the best information reasonably available to easily determine how much water has been used by irrigation from an aquifer. These summaries have never been revised to reflect updated data or to correct water sources. There are minor differences between the values in Table 2 and Table 4 for the number of permits and the reported irrigation due to more recent data being represented in Table 2.

Table 4. Annual Summary of Reported Irrigation from the Tulare: Western Spink Hitchcock aquifer (Water Rights, 1980-2020)

Year	Number of Permits Reported	Reported Irrigation [acre-feet]
1979	133	5,265.00
1980	134	6,676.00
1981	148	10,255.00
1982	111	6,116.30
1983	116	9,057.14
1984	130	8,255.50
1985	136	7,617.80
1986	136	3,528.00
1987	118	9,524.00
1988	121	13,351.90
1989	118	14,981.20
1990	118	11,801.00
1991	117	12,403.50
1992	114	5,390.00
1993	115	2,255.40
1994	115	5,849.66
1995	114	6,567.52

1996	115	12,596.67
1997	113	3,065.00
1998	112	6,180.06
1999	114	8,633.58
2000	122	11,273.48
2001	118	12,302.56
2002	121	18,649.47
2003	131	19,397.25
2004	129	15,185.22
2005	129	15,669.49
2006	129	18,572.88
2007	130	12,552.56
2008	129	9,655.30
2009	129	8,261.53
2010	130	2,959.35
2011	130	8,512.07
2012	134	20,861.78
2013	149	11,671.04
2014	158	14,934.34
2015	162	10,910.11
2016	162	18,496.81
2017	162	18,305.35
2018	162	13,519.08
2019	159	421.52
<i>MAX</i>		20,861.78
<i>MIN</i>		421.52
<i>AVE</i>		10,523.94

Balance of Recharge to Discharge

At the December 4th, 2002 meeting of the South Dakota Water Management Board, the Western Spink management unit and Hitchcock management unit were combined into a single management unit of the Tulare aquifer. The Tulare: Western Spink Hitchcock management unit was estimated as underlying 288,700 acres, containing 1.212 million acre-feet of recoverable water in storage, and 19,960 acre-feet of annual recharge (Goodman, 2002). Based upon the maximum water use and undeveloped permits, 3,400 acre-ft of water was found to be available. Assuming an application rate of 16 inches, 11 water right permits were issued for the irrigation of 2,654.4 acres as a result of combining management units. The remaining applications were deferred for a period of five years.

In applying SDCL 46-6-3.1, the Sixth Judicial Circuit Court of South Dakota ruled in 2005 that if the Water Management Board uses average annual recharge, then it should also use average annual withdrawals to determine if unappropriated water is available from an aquifer (Hines, Phillip W. v. Department of Environment and Natural Resources, 2005).

At the December 7, 2007 meeting of the South Dakota Water Management Board, the board heard testimony regarding a report on 33 deferred and 4 new water permit applications from the Tulare: Western Spink Hitchcock aquifer management unit (Goodman, 2007). This report used the previous five years of data, 2002-2006, and determined that the reported water use over the 5 years averaged 17,495 acre-feet per year. However, there was “not reported or undeveloped acreage” that were then accounted for by estimating their water use (Goodman, 2007). This estimation brought the estimated average annual use to 19,927 acre-feet per year. The estimated average annual recharge rate was 19,960 acre-feet per year. The 37 water permit applications were denied, and the aquifer management unit was declared fully appropriated.

A set of six new water permit applications were to be brought before the South Dakota Water Management Board on May 2, 2012 in response to the applicants contesting the Chief Engineer’s recommendation of denial. As part of this process, a staff engineer reevaluated the availability of unappropriated water. The areal extent of the Tulare: Western Spink Hitchcock aquifer management unit was revised to be 263,016 acres (Buhler, 2012a). The recharge rate as determined by Kuiper (1984) was applied over this areal extent to determine that the estimated average annual recharge is 18,192 acre-feet per year. The average application rate on irrigated acres was 9.32 inches for the period of 1979 through 2011, excluding 1980-1982 due to a lack of data. Applying 18,192 acre-feet of water at a rate of 9.32 inches would allow the irrigation of 23,423 acres. At the time of the report there were 22,838.8 acres authorized for irrigation, the hydrologic budget showed that an additional 584.2 acres could be irrigated without exceeding the average annual recharge. The observation well analysis as calculated by Buhler (2012a) over the years of 1983 to 2011 showed an average rise of 0.34 feet in the unconfined portions of the management unit. The unconfined area was estimated to be 11,149 acres, using a specific yield for the aquifer of 0.15, results in the average annual recharge exceeding average annual withdrawals by 569 acre-feet which, applied at a rate of 9.32 inches allows the irrigation of an additional 733 acres. The applicants entered a stipulation with the Chief Engineer and the Chief Engineer approved 5 of the 6 applications for 810 acres of irrigation. As discussed earlier in the report, the 2011 water year was calculated for only a partial year, if the entire year was used in the calculation, the average observation well rise would change from 0.34 feet per year to 0.30 feet per year. This would reduce the amount recharge exceeds withdrawals from 569 acre-feet per year to 502 acre-feet per year and would have allowed the irrigation of 646 acres.

After a review was conducted on the Tulare: East James aquifer management unit (Buhler, 2012b), it was realized that the previous analysis on the Tulare: Western Spink Hitchcock aquifer management unit was overly conservative (Buhler, 2013). The recharge to acres method that Buhler used in the 2012 and 2013 reports calculated the number of acres that could be irrigated given the total amount of recharge. The difference in the recharge to acres method between the 2012 and 2013 reports is that the 2013 report factors in the number of acres that were irrigated vs the number of acres that were authorized for irrigation, or the utilization rate. The 2012 report assumed 100% of the acres were being irrigated every year, resulting in an additional 584.4 acres that could be irrigated. The 2013 report calculated that on average 69.02% of acres were utilized over the 2003 to 2011 period. The estimated average annual recharge was 18,192 acre-feet per year, which would allow the irrigation of 23,423 acres. At the time of Buhler’s report there were 23,648.8 acres authorized for irrigation, applying the utilization rate of 69.02%, Buhler calculated that the expected irrigation acreage would be 16,322.4 acres and that an additional

7,100 acres could be irrigated annually. The Water Management Board did not want to speculate on the future usage of any recently approved acres and did not find the recharge to acres method useful (SD Water Management Board, 2013).

Buhler (2013) delineated a new unconfined area of the aquifer using 3D representations of the October 2012 potentiometric surface and the top of the aquifer. This resulted in an increase in the unconfined area from 11,149 acres to 76,978 acres. The observation well analysis was also recalculated to only include water years that were considered fully developed (water year 2003 through water year 2012). This observation well analysis still included the partial calculation of the water year 2011. The period of water year 2003 to water year 2012 is a period when no additional acres were permitted, it was not a period of being fully developed as the water right permits issued in 2002 were still constructing their systems and placing water to beneficial use. Of the 11 water right permits issued in 2002, the last permits to first place their water to beneficial use occurred during the 2008 irrigation season. The observation well analysis as calculated in Buhler's report (2013) for the period of 2003 to 2012 produced an average rise of 0.3152 feet per year. If the complete water year for 2011 is used in the calculations, the average rise from 2003 to 2012 changes to 0.21 feet per year. If the fully developed period of 2008 through 2012 was used for the calculations, the average rise would be 0.14 feet per year. Using a specific yield of 0.15, the average annual exceedance of recharge to withdrawals would change from 3,640 acre-feet to 2,425 acre-feet for the 0.21 feet per year rise, and 1,617 acre-feet for the 0.14 feet per year rise. Using the average irrigation application rate of 9.32 inches per year, Buhler's report (2013) showed that an additional 4,686 acres could have been irrigated. The number of additional acres that could have been irrigated is reduced to 3,122 acres for the 0.21 feet per year rise, and 2,081 acres for the 0.14 feet per year rise. 810 acres should be subtracted from these estimates as there were 5 water right applications for a total of 810 acres approved for irrigation in 2012. Twelve water right applications were approved to irrigate 2,131 acres on May 2, 2013 and 11 water right applications were approved to irrigate 1,765 acres on July 11, 2013, for a total of 4,706 acres of irrigation approved in 2012 and 2013.

There is no mention in Buhler's 2013 report of how the recently developed permits that were approved in 2002 affected the average annual use over the period of 2003-2011 or if the withdrawals due to the recent permits would be accurately reflected in a calculation for that period. Table 5 shows the permits that have been approved since 2002 for the irrigation of "new" acres, acres that were not previously authorized under an existing water right, and when they placed their appropriated water to beneficial use.

Table 5. Water right permits approving new acres since 2002 (Water Rights, 2020c)

Permit No.	Year Approved	Year water placed to beneficial use
6330-3	2002	2008
6331-3	2002	2007
6332-3	2002	2003
6333-3	2002	2008
6334-3	2002	2003
6336-3	2002	2003
6337-3	2002	2003

6338-3	2002	2006
6339-3	2002	2003
6340-3	2002	2006
6343-3	2002	2003
7289-3	2012	2013
7290-3	2012	2013
7291-3	2012	2013
7292-3	2012	2013
7293-3	2012	2013
7391-3	2012	2014
7373-3	2013	2013
7551-3	2013	2014
7570-3	2013	2016
7571-3	2013	2015
7572-3	2013	2015
7573-3	2013	2015
7574-3	2013	2014
7575-3	2013	2016
7620-3	2013	2016
7637-3	2013	2013
7638-3	2013	2017
7639-3	2013	2014
7640-3	2013	2013
7685-3	2013	2014
7716-3	2013	2018
7717-3	2013	2014
7718-3	2013	2014
7719-3	2013	2013
7720-3	2013	2014
7721-3	2013	2017
7722-3	2013	2014
7723-3	2013	2014
7724-3	2013	2016
7725-3	2013	2015

A metric other than the total withdrawals over the entire period of record should be utilized to prevent over-appropriation of water from the Tulare: Western Spink Hitchcock aquifer as a result of the 5-year reviews. For example, using Buhler's (2012b) hydrologic budget methodology repeatedly, if the existing data from 1979-2019 is used, with the average withdrawal of 10,681 acre-feet per year, and the years of 2020 through 2024 (5 years) pump an average of 15,000 acre-feet per year, the estimated average annual use over the entire period would rise to 11,183 acre-feet per year. At the end of that 5-year period, there would be an additional 7,000 acre-feet of water which could be appropriated as a result of the 5-year review because the estimated average

annual use is still below the estimated average annual recharge of 18,192 acre-feet. If the next 5-year period pumps an average of 20,000 acre-feet per year, the estimated average annual use over the entire period would rise to 12,101 acre-feet per year. At the end of this 5-year period, there would be an additional 6,000 acre-feet of water which could be appropriated. If the next 5-year period pumps an average of 25,000 acre-feet per year, the estimated average annual use over the entire period of record would rise to 13,318 acre-feet per year. If withdrawals continued to average 25,000 acre-feet per year with no additional appropriations, it would take fewer than 50 years for the average annual withdrawal over the entire period of record, to exceed the average annual recharge to the aquifer. By the time the average annual withdrawals reach the average annual recharge, the aquifer will be well over-appropriated, and the average annual withdrawals will continue to increase into the future. Repeated use of this methodology will result in the aquifer being over-appropriated in the future.

Figure 9 shows the number of irrigated acres approaching the number of authorized acres, indicating that irrigation practices have changed in the area of the Tulare: Western Spink Hitchcock aquifer. These changes may be due to climate, modern farming practices, crop prices, the production of ethanol, and the consolidation, relocation, and transference of irrigation water rights. Appendix A contains an approximate timeline of events regarding Water Rights in the Tulare: Western Spink Hitchcock aquifer, including the amending and transferring of acres to other lands.

Use of the average application rate and the utilization of acres would be a better determination of the estimated average annual use when the number of authorized acres has not remained constant. The application rate is the reported use divided by the number of irrigated acres and the utilization of acres is the number of irrigated acres divided by the number of authorized acres. The average application rate would account for factors regarding the climate over time, allowing for consideration of both dry and wet periods. The average utilization of acres would account for factors regarding farming practices, this could be looked at on a shorter period to allow for recent changes to be in effect.

As of the beginning of the 2020 irrigation season, there are 26,104.9 acres authorized for irrigation. Applying the average application rate (1979, 1983-2019) of 9.06 inches over the authorized acres results in an estimated average annual use of 19,709 acre-feet of water. While it is impossible for the average percentage of irrigated acres to authorized acres to ever reach 100% over the entire period of record, 4 out of the 8 years (2012-2019) since Buhler's (2013) report have exceeded 87% utilization of authorized acres with the maximum utilization reaching 92.7% in 2017. The utilization rate of authorized acres and the estimated average annual use using the average application rate of 9.06 inches for authorized acres is calculated in Table 6.

Table 6. Utilization Rate of Authorized Acres and Estimated Average Annual Use calculated using 26,104.9 authorized acres and the application rate of 9.06 inches

Average Utilization Rate of Authorized Acres	Estimated Average Annual Use [acre-feet per year]
100%	19,709
60.1% (1979-2011)	11,845
63.4% (1979-2019)	12,496

73.6% (2003-2011)	14,506
87% (exceeded by 4 out of 8 previous years)	17,147
92.7% (2017)	18,270
85% (2012-2018)	16,753
75.6% (2012-2019)	14,900
88.2% (2015-2018)	17,384
72.6% (2015-2019)	14,309

Kuiper's model estimated the recharge to the aquifer to best simulate the observed observation well hydrographs over the period of 1968 to 1978. It is unknown how well this model fits the last 42 years of observation well data. Kuiper's model estimated the average annual recharge to the Tulare: Western Spink Hitchcock aquifer to be 23,000 acre-feet per year, within the boundaries of the model. Given the currently identified boundaries of the Tulare: Western Spink Hitchcock aquifer and the mismatch to the model boundaries, it is improper to assume that a spatially variable recharge rate can be averaged out across the model area and then applied to a significantly reduced aquifer area. The estimated average annual recharge is unknown for the currently identified boundaries of the Tulare: Western Spink Hitchcock aquifer, and while improper, use of the 0.83 inches per year of recharge as calculated from Kuiper's model across the entire area of the aquifer (263,016 acres) is the best reasonably available estimate of the average annual recharge to the Tulare: Western Spink Hitchcock aquifer. The estimated average annual recharge to the Tulare: Western Spink Hitchcock aquifer is 18,192 acre-feet per year.

Given the uncertainties involved with the estimated average annual recharge model, it is unknown if the estimated average annual recharge rate of 18,192 acre-feet per year as used in past reports is above or below the actual recharge rate. Using the average application rate of 9.06 inches over the period of record and the current authorized acreage, the estimated average annual use for irrigation withdrawals using the average utilization rate (72.6%) for the time period of 2015-2019 is 14,309 acre-feet per year. Excluding the abnormally wet year of 2019, the average utilization rate for the time period of 2015-2018 better reflects the expected usage of the Tulare: Western Spink Hitchcock for the current authorized acreage. Assuming recent irrigation practices continue, the best reasonable estimated withdrawals from irrigation use is the 17,384 acre-feet per year as calculated using the utilization rate from 2015-2018 of 88.2%, the total of 26,104.9 authorized acres, and the average application rate of 9.06 inches on irrigated acres over the period of record. However, during the time period of 2015-2019, permitted appropriations were still being constructed and placed to beneficial use.

With the continual increase in placing water to beneficial use through 2018, it is currently unknown what an average utilization rate may be over a longer period, and it may be more appropriate to estimate the usage from irrigated acres at full utilization. In addition to the new appropriations placing their water to beneficial use, there has been ongoing transferring and moving of acres and diversion points across the management unit (see Appendix A), resulting in existing appropriations being placed to better use. If the authorized acres were fully utilized, with an application rate of 9.06 inches, the estimated average annual use for irrigation is 19,709 acre-feet per year.

The hydrologic budget provides a quantitative approach to the availability of unappropriated water. Within the hydrologic budget, the estimated average annual use for domestic use is 56 acre-feet per year, and the estimated average annual use for commercial use is 58 acre-feet per year. The hydrologic budget also estimates that the estimated average annual use from irrigation is 17,384 acre-feet per year assuming current irrigation trends continue, or 19,709 acre-feet per year assuming that all acres are fully utilized. If the current irrigation trend (2015-2018 time period) continues, the hydrologic budget estimates that there is an average of 17,498 acre-feet of water used per year. If the current irrigation trend does not continue and authorized acres continue to see increasing use, assuming full use of the authorized acres would result in the hydrologic budget estimating that the average annual use is 19,823 acre-feet of water per year. The estimated average annual recharge is 18,192 acre-feet per year. If current irrigation trends continue, there would be 694 acre-feet of water available for appropriation from the hydrologic budget. If current irrigation trends do not continue and there is an increase in the usage of the authorized acres, the maximum estimated average annual use is the full utilization of authorized acres and would exceed the estimated average annual recharge by 1,631 acre-feet per year. In order for the recently developed systems and recently moved systems to be properly reflected in application rate and utilization rate data, it would be reasonable to estimate the average annual use by assuming full utilization of the authorized acres. Based upon the full utilization of acres for irrigation, the hydrologic budget shows that there is no unappropriated water available from the Tulare: Western Spink Hitchcock aquifer.

CONCLUSIONS

1. The Tulare: Western Spink Hitchcock aquifer is a glacial outwash aquifer that is generally found under confined conditions and buried under a layer of glacial till.
2. The best information currently available indicates that the Tulare: Western Spink Hitchcock aquifer underlies approximately 263,016 acres of Spink, Beadle, and Hand Counties.
3. The SD DENR-Water Rights Program observation well data documents that over the period of 1983 through 2018, the water level in the unconfined portions of the Tulare: Western Spink Hitchcock aquifer has increased an average of 0.18 feet per year.
4. Appropriations made in 2012 and 2013 relied upon the water level increase in the unconfined portions of the Tulare: Western Spink Hitchcock aquifer. There is no water available for appropriation from the 0.18 feet per year rise calculated over the period of 1983-2018 as it was already accounted for in prior appropriations.
5. The SD DENR-Water Rights Program observation well data documents that over the period of 2013 through 2018, the water level in the unconfined portions of the Tulare: Western Spink Hitchcock aquifer has decreased an average of 0.02 feet per year.
6. The SD DENR-Water Rights Program observation well data documents that over the period of record the configuration of the potentiometric surface of the Tulare: Western Spink Hitchcock aquifer has not changed significantly with time or increased development. The elevation of the potentiometric surface has changed throughout time,

however the direction of groundwater flow has not been significantly affected by withdrawals.

7. The estimated average annual recharge to the Tulare: Western Spink Hitchcock aquifer was estimated as 23,000 acre-feet per year by Kuiper's model. The estimated average annual recharge is 18,192 acre-feet per year due to a reduction in the areal extent of the aquifer since the development of Kuiper's model.
8. Kuiper's recharge rate was based upon 11 years of observation well data between 1968 and 1978. Thirty-two observation wells have been drilled into the Tulare: Western Spink Hitchcock aquifer since 1978 and there are 42 additional years of observation well data since 1978.
9. It is improper to assume the spatially variable recharge rate found in Kuiper's model can be averaged across the model domain and then applied to a significantly reduced area. Although it is unknown what the effects of a reduced area are, the current best estimated average annual recharge to the Tulare: Western Spink Hitchcock aquifer is 18,192 acre-feet per year.
10. The Tulare: Western Spink Hitchcock aquifer currently has 159 permitted or licensed water rights appropriating water. Of these, 157 water rights currently authorize the irrigation of 26,104.9 acres. The other 2 water rights are for commercial use for 0.096 cubic feet per second of water.
11. All water right permits approved since 2012 have placed their water to beneficial use as of the 2018 irrigation season.
12. There is one water year over the period of record that would show the balance of recharge to withdrawals from the observation well data at the current level of appropriations, and that year (water year 2019) was an anomalously wet year.
13. The continued moving of authorized acres and diversion points to other lands is increasing the usage of authorized acres over time by placing water to a better beneficial use.
14. Excluding the anomalously wet year of 2019, the authorized acres saw a utilization rate of 88.2% over the years of 2015-2018. Including the anomalously wet year of 2019, the authorized acres saw a utilization rate of 72.6% over the years of 2015-2019.
15. The application rate on irrigated acres over the period of record (1979,1983-2019) is 9.06 inches.
16. Assuming current irrigation trends continue, the estimated average annual use from the Tulare: Western Spink Hitchcock aquifer is 17,384 acre-feet per year at 88.2% utilization of authorized acres.

17. If all acres that are authorized for irrigation (26,104.9 acres) apply the average application rate of 9.06 inches, the estimated average annual use from the Tulare: Western Spink Hitchcock aquifer is 19,709 acre-feet per year.
18. Based upon the downward trend observed in the observation well analysis over the time period of 2013-2018, the hydrologic budget, and the lack of a stable period of development, there is not a reasonable probability that unappropriated water is available from the Tulare: Western Spink Hitchcock aquifer.



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Appendix A: Approximate Timeline of Water Right Activity in the Western Spink Hitchcock Management Unit of the Tulare Aquifer since the year 2000.

Date	Water Right	Action	Water Right Status	Change in Authorized Acres
02/14/2000	6159-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	132
02/21/2000	6160-3	Permit approved by Chief Engineer for Tulare: Western Spink	PE	160
03/20/2000	6175-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	160
04/17/2000	6184-3	Permit approved by Chief Engineer for Tulare: Western Spink	PE	135
06/05/2000	2428A-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	0
06/05/2000	2428-3	Incorporated into Water Right permit 2428A-3	IP	0
06/05/2000	6193-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	90
07/17/2000	6196-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	160
07/31/2000	6200-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	160
07/31/2000	6201-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	480
01/02/2001	6234-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	135
02/12/2001	6238-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	130
02/12/2001	6239-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	260
02/12/2001	6240-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	132
08/13/2001	5798-3	Result of Licensing (160 to 132 acres)	LC	-28
08/13/2001	5771-3	Incorporated into Water Right 6184-3	IL	0
08/13/2001	6184-3	Result of Licensing (135 acres + Inc. 5771-3 135 acres to 270 acres)	LC	0
08/13/2001	2428A-3	Result of Licensing (136 to 136 acres)	LC	0
03/18/2002	6288-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	160
05/31/2002	4912B-3	Water Right 4912A-3 was divided, 4912B-3 took 136 of the 301 acres	LC	0
06/04/2002	6312-3	Permit approved by Chief Engineer for Tulare: Hitchcock	PE	160
07/26/2002	6344-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
07/26/2002	6345-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
07/26/2002	6346-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
07/26/2002	6347-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
07/29/2002	6348-3	Date Received, Deferred by WMB, Withdrawn due to approval of 6339A-3 on 3-5-03	WI	
08/07/2002	6351-3	Date Received, Recommended for Denial, Withdrawn 11-12-02	WI	
08/08/2002	6352-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
08/08/2002	6353-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
09/19/2002	6359-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
09/19/2002	6360-3	Date Received, WMB Deferred at 12-4-02 meeting, WMB Denied at 12-6-07 meeting	DN	
09/19/2002	6361-3	Date Received, WMB Deferred at 12-4-02 meeting, withdrawn upon approval of 472A-3	WI	

12/04/2002		Board combines Tulare: Hitchcock and Tulare: Western Spink management units		
12/04/2002	6330-3	Permit approved by WMB	PE	157
12/04/2002	6331-3	Permit approved by WMB	PE	157
12/04/2002	6332-3	Permit approved by WMB	PE	153
12/04/2002	6333-3	Permit approved by WMB	PE	320
12/04/2002	6334-3	Permit approved by WMB	PE	267.4
12/04/2002	6336-3	Permit approved by WMB	PE	160
12/04/2002	6337-3	Permit approved by WMB	PE	320
12/04/2002	6338-3	Permit approved by WMB	PE	320
12/04/2002	6339-3	Permit approved by WMB	PE	320
12/04/2002	6340-3	Permit approved by WMB	PE	160
12/04/2002	6343-3	Permit approved by WMB	PE	320
12/05/2002	6374-3	Date Received, WMB Deferred at 3-5-03 meeting, WMB Denied at 12-6-07 meeting	DN	
03/05/2003	6339A-3	Permit approved by Chief Engineer - takes 160 acres from 6339-3	PE	0
03/05/2003	6339-3	Divided, Water Permit 6339A-3 took 160 acres, 6339B-3 is remaining 160 acres	PE	0
03/10/2003	6334A-3	Permit approved to move the location of 133.7 out of 267.4 acres of permit 6334-3	PE	0
03/10/2003	6334-3	Divided, Water Permit 6334A-3 took 133.7 acres, remaining portion permitted as 6334B-3	PE	0
03/13/2003	2471B-3	Licensed, incorporated 2471-3 and 2471A-3 (202 to 202 acres)	LC	0
03/13/2003	2471-3	Incorporated into Water Right 2471B-3	IL	0
03/13/2003	2471A-3	Incorporated into Water Right 2471B-3	IL	0
09/11/2003	386-3	Divided, Water Right 386A-3 took 42.1 acres, 386B-3 took 118.8 acres	OC	0
09/11/2003	386A-3	Ownership Change, took 42.1 acres from 386-3	LC	0
09/11/2003	386B-3	Ownership Change, took 118.8 acres from 386-3	LC	0
09/11/2003	386A-3	Incorporated into Water Right 4167-3	IL	0
09/11/2003	4167-3	Water Right License 4167-3 reissued to incorporate 386A-3	LC	-42.1
12/03/2003	2568-3	Cancelled by WMB for abandonment/forfeiture	CA	-136
12/03/2003	4146-3	Cancelled by WMB for abandonment/forfeiture	CA	-130
12/03/2003	4147-3	Cancelled by WMB for abandonment/forfeiture	CA	-130
12/03/2003	4545-3	Cancelled by WMB for abandonment/forfeiture	CA	-79
12/03/2003	4546-3	Cancelled by WMB for abandonment/forfeiture	CA	-227
12/03/2003	4260-3	Cancelled by WMB for abandonment/forfeiture	CA	-126.8
12/03/2003	386B-3	Cancelled by WMB for abandonment/forfeiture	CA	-118.8
12/29/2003	6159-3	Result of Licensing (132 to 128 acres)	LC	-4
01/16/2004	6334C-3	Date Received, Withdrawn 3-3-04	WI	
01/20/2004	6460-3	Date Received, WMB Deferred at 5/12/04 meeting, WMB Denied at 12-6-07 meeting	DN	
01/20/2004	6461-3	Date Received, WMB Deferred at 5/12/04 meeting, WMB Denied at 12-6-07 meeting	DN	
01/20/2004	6462-3	Date Received, WMB Deferred at 5/12/04 meeting, WMB Denied at 12-6-07 meeting	DN	
01/20/2004	6463-3	Date Received, WMB Deferred at 5/12/04 meeting, WMB Denied at 12-6-07 meeting	DN	

03/03/2004	6201A-3	Permit approved by Chief Engineer - takes 84 acres from 6201-3 and 51 acres from 6343-3	PE	0
03/03/2004	6343-3	Permit Reissued for 269 of 320 acres, 6201A-3 severed 51 acres	PE	0
03/03/2004	6201-3	Permit reissued due to 6201A-3 taking 84 acres	PE	0
03/03/2004	6343-3	Permit reissued due to 6201-3 taking 51 acres	PE	0
02/14/2005	6594-3	Date Received, WMB Deferred at 7/6/05 meeting, WMB Denied at 12-6-07 meeting	DN	
09/12/2005	6660-3	Date Received, WMB Deferred at 12/7/05 meeting, WMB Denied at 12-6-07 meeting	DN	
09/12/2005	6661-3	Date Received, WMB Deferred at 12/7/05 meeting, WMB Denied at 12-6-07 meeting	DN	
09/30/2005	6196-3	Result of Licensing (160 to 136 acres)	LC	-24
09/30/2005	6200-3	Result of Licensing (160 to 136 acres)	LC	-24
09/30/2005	6332-3	Result of Licensing (153 to 136 acres)	LC	-17
11/07/2005	6668-3	Date Received, WMB Deferred at 3/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
11/07/2005	6669-3	Date Received, WMB Deferred at 3/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
11/07/2005	6670-3	Date Received, WMB Deferred at 3/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
11/07/2005	6671-3	Date Received, WMB Deferred at 3/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
01/27/2006	6687-3	Date Received, WMB Deferred at 5/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
01/27/2006	6688-3	Date Received, WMB Deferred at 5/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
01/27/2006	6689-3	Date Received, WMB Deferred at 5/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
02/03/2006	6911-3	Date Received, Withdrawn prior to Chief Engineer's recommendation	WI	
02/09/2006	6693-3	Date Received, WMB Deferred at 5/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
02/09/2006	6694-3	Date Received, WMB Deferred at 5/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
02/09/2006	6695-3	Date Received, WMB Deferred at 5/3/06 meeting, WMB Denied at 12-6-07 meeting	DN	
07/12/2006	6338A-3	Permit approved by Chief Engineer - takes 56 acres from 6338-3, 28 acres each from 6339A-3, 6339B-3, 6340-3	PE	-70
07/12/2006	6338-3	Permit reissued due to 6338A-3 taking 56 of 320 acres	PE	0
07/12/2006	6339A-3	Permit reissued due to 6338A-3 taking 28 of 160 acres	PE	0
07/12/2006	6339B-3	Permit reissued due to 6338A-3 taking 28 of 160 acres	PE	0
07/12/2006	6340-3	Permit reissued due to 6338A-3 taking 28 of 160 acres	PE	0
11/13/2006	6776-3	Date Received, WMB Deferred at 3/7/07 meeting, WMB Denied at 12-6-07 meeting	DN	
01/22/2007	6764-3	Permit approved by Chief Engineer - takes 24 acres from 6336-3 and 28 acres from 6337-3	PE	0
01/22/2007	6336-3	Permit Reissued for 136 of 160 acres, 6764-3 severed 24 acres	PE	0
01/22/2007	6337-3	Permit Reissued for 292 of 320 acres, 6764-3 severed 28 acres	PE	0
01/22/2007	2485-3	Water Right permit 6764-3 authorized moving 130 of 130 acres	LC	0
02/27/2007	6829-3	Date Received, WMB Deferred at 7/11/07 meeting, WMB Denied at 12-6-07 meeting	DN	
02/27/2007	6830-3	Date Received, WMB Deferred at 7/11/07 meeting, WMB Denied at 12-6-07 meeting	DN	
02/27/2007	6841-3	Date Received, WMB Deferred at 7/11/07 meeting, WMB Denied at 12-6-07 meeting	DN	
02/27/2007	6842-3	Date Received, WMB Deferred at 7/11/07 meeting, WMB Denied at 12-6-07 meeting	DN	
03/07/2007	472A-3	Permit approved by Chief Engineer, amended 472-3 and moved all acres	PE	0
03/07/2007	472-3	Incorporated into Water Right 472A-3	IP	0
05/14/2007	6330A-3	Permit approved by Chief Engineer - moved 157 of 157 acres of 6330-3 to new land	PE	0

05/14/2007	3065B-3	Permit approved by Chief Engineer, amended 3065A-3 and moved all acres	PE	0
05/14/2007	6330-3	Amended by Water Right permit 6330A-3	IP	0
06/07/2007	6863-3	Date Received, WMB Denied at 12-6-07 meeting	DN	
06/07/2007	6864-3	Date Received, WMB Denied at 12-6-07 meeting	DN	
06/11/2007	6865-3	Date Received, WMB Denied at 12-6-07 meeting	DN	
06/11/2007	6866-3	Date Received, WMB Denied at 12-6-07 meeting	DN	
07/02/2007	6312A-3	Permit approved by Chief Engineer, took diversion authority for 28 acres from 6312-3, 56 acres from 6333-3, 25 acres from 6331-3	PE	-109
07/02/2007	6312-3	Reissued Permit for 132 of 160 acres, 28 acres went to 6312A-3	PE	0
07/02/2007	6333-3	Reissued Permit for 264 of 320 acres, 56 acres + div rate went to 6312A-3	PE	0
07/02/2007	6331A-3	Permit approved by Chief Engineer, took 132 of 157 acres from 6331-3	PE	0
07/02/2007	6331-3	Divided, Water Permit 6331A-3 took 132 acres, Water Permit 6312A-3 took 25 acres	IL	0
08/01/2007	6240-3	Result of Licensing (132 to 132 acres)	LC	0
08/03/2007	6234-3	Result of Licensing (135 to 134 acres)	LC	-1
08/03/2007	6238-3	Result of Licensing (130 to 130 acres)	LC	0
08/03/2007	6239-3	Result of Licensing (260 to 260 acres)	LC	0
10/09/2007	6288-3	Result of Licensing (160 to 136 acres)	LC	-24
10/29/2007	6333A-3	Permit approved by Chief Engineer - took 100 acres from 6333-3	PE	0
10/29/2007	6333B-3	Permit approved by Chief Engineer - took 134 acres from 6333-3	PE	0
10/29/2007	6333-3	Divided, Water Permit 6333A-3 took 100 acres, 6333B-3 took 134 acres, 30 acres left with no div?	IP	-30
10/30/2007	6160-3	Result of Licensing (160 to 136 acres)	LC	-24
10/30/2007	6336-3	Result of Licensing (136 to 136 acres)	LC	0
11/05/2007	6175-3	Result of Licensing (160 to 136 acres)	LC	-24
11/13/2006	6777-3	Date Received, WMB Deferred at 3/7/07 meeting, WMB Denied at 12-6-07 meeting	DN	
12/06/2007		WMB hearing on 33 deferred applications, all denied		
01/23/2008	6312-3	Result of Licensing (132 of 132 acres)	LC	0
01/24/2008	6142-3	Result of Licensing (100 + 140 (4897-3) to 240 acres)	LC	0
01/24/2008	6337-3	Result of Licensing (292 to 272 acres)	LC	-20
01/24/2008	6331A-3	Result of Licensing (132 of 132 acres)	LC	0
01/24/2008	4897-3	Incorporated into Water Right 6142-3	IL	
01/28/2008	6338-3	Result of Licensing (264 to 264 acres)	LC	0
01/28/2008	6339B-3	Result of Licensing (132 to 132 acres)	LC	0
01/28/2008	6340-3	Result of Licensing (132 to 132 acres)	LC	0
01/28/2008	6339A-3	Result of Licensing (132 to 132 acres)	LC	0
01/28/2008	6338A-3	Result of Licensing (70 to 68 acres)	LC	-2
04/08/2008	6108-3	Result of Licensing (136 + 168 (2569-3) to 304 acres)	LC	0
04/08/2008	2569-3	Incorporated into Water Right 6108-3	IL	0
05/16/2008	6201-3	Result of Licensing (396 to 396 acres)	LC	0
05/16/2008	6334B-3	Result of Licensing (133.7 to 132 acres)	LC	-1.7

05/16/2008	6343-3	Result of Licensing (269 to 264 acres)	LC	-5
05/16/2008	6334A-3	Result of Licensing (133.7 to 132 acres)	LC	-1.7
05/16/2008	6201A-3	Result of Licensing (135 to 132 acres)	LC	-3
05/16/2008	2485-3	Incorporated into Water Right licene 6764-3, 130 of 130 acres	IL	0
05/16/2008	6764-3	Result of Licensing, incorporates 130 acres from 2485-3 and 90 acres from 6193-3	LC	0
05/16/2008	6193-3	Incorporated into Water Right 6764-3	IL	0
06/12/2008	6333B-3	Result of Licensing (134 of 134 acres)	LC	0
10/30/2008	3065B-3	Result of Licensing (130 to 130 acres)	LC	0
10/30/2008	3065A-3	Amended by Water Right 3065B-3, 130 of 130 acres moved	IP	0
11/23/2009	7126-3	Permit approved by Chief Engineer - transferred 45 of 130 acres from 3054A-3	PE	0
11/23/2009	3054A-3	Reissued License for 85 of 130 acres due to approval of 7126-3	LC	0
04/27/2010	7198-3	Date Received, WMB Denied at 12-1-10 meeting	DN	
03/22/2011	4622A-3	Permit approved by Chief Engineer, took 101 acres from 4622-3 and 29 acres from 1523-3	PE	0
03/22/2011	4622-3	Amended by Water Right permit 4622A-3, 101 of 101 acres + diversion transferred	LC	0
03/22/2011	1523-3	29 acres taken by Water Right permit 4622A-3, Water Right license reissued for 131 acres	LC	0
07/12/2011	7863-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
10/05/2011	4622-3	Cancelled due to 4622A-3 taking all acres and diversion	CA	0
12/15/2011	7288-3	Date Received, Withdrawn due to stipulation with Chief Engineer	WI	
04/16/2012	6201B-3	Permit Approved by Chief Engineer, transferred all acres and diversion to other land	PE	0
04/16/2012	6201A-3	Incorporated into Water Right 6201B-3	IP	0
06/29/2012	7378-3	Date received, Chief Engineer recommended denial, withdrawn 9-27-12	WI	
06/29/2012	7379-3	Date received, Chief Engineer recommended denial, withdrawn 9-27-12	WI	
07/11/2012	7289-3	Permit approved by WMB	PE	270
07/11/2012	7290-3	Permit approved by WMB	PE	135
07/11/2012	7291-3	Permit approved by WMB	PE	135
07/11/2012	7292-3	Permit approved by WMB	PE	135
07/11/2012	7293-3	Permit approved by WMB	PE	135
08/23/2012	7390-3	Date received, withdrawn 8-7-13	WI	
10/09/2012	7126A-3	Permit approved by Chief Engineer - transferred acres back to their original location	PE	0
10/09/2012	7391-3	Permit approved by Chief Engineer, additional source (spring + drain tile) on acres covered by 6201B-3	PE	136
10/09/2012	7126-3	Cancelled by approval of 7126A-3, 45 of 45 acres were moved	CA	0
12/06/2012	282-3	Cancelled by WMB for abandonment/forfeiture	CA	-160
02/08/2013	7726-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/08/2013	7752-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/08/2013	7753-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/08/2013	7754-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/08/2013	7755-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/08/2013	7756-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	

02/08/2013	7757-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/08/2013	7759-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/10/2013	7727-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/11/2013	7731-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/11/2013	7732-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/15/2013	7733-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/15/2013	7734-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/15/2013	7736-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/19/2013	7737-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7738-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7739-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7740-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7741-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7742-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7743-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7744-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7745-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/19/2013	7746-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/28/2013	7751-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
02/28/2013	7758-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
03/07/2013	7373-3	Permit approved by WMB	WI	160
03/13/2013	7790-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
03/19/2013	7799-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
04/09/2013	7822-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
04/09/2013	7823-3	Date received, recommended for denial, withdrawn 6-13-13	WI	
05/02/2013	7551-3	Permit approved by WMB, additional acres on 470A-3	PE	90
05/02/2013	7637-3	Permit approved by WMB	PE	135
05/02/2013	7638-3	Permit approved by WMB	PE	135
05/02/2013	7639-3	Permit approved by WMB	PE	135
05/02/2013	7570-3	Permit approved by WMB	PE	280
05/02/2013	7571-3	Permit approved by WMB	PE	160
05/02/2013	7572-3	Permit approved by WMB	PE	140
05/02/2013	7573-3	Permit approved by WMB	PE	160
05/02/2013	7574-3	Permit approved by WMB	PE	160
05/02/2013	7575-3	Permit approved by WMB	PE	280
05/02/2013	7575A-3	Permit approved by Chief Engineer, half of 7575-3	PE	0
05/02/2013	7575B-3	Permit approved by Chief Engineer, half of 7575-3	PE	0
05/02/2013	7640-3	Permit approved by WMB	PE	160

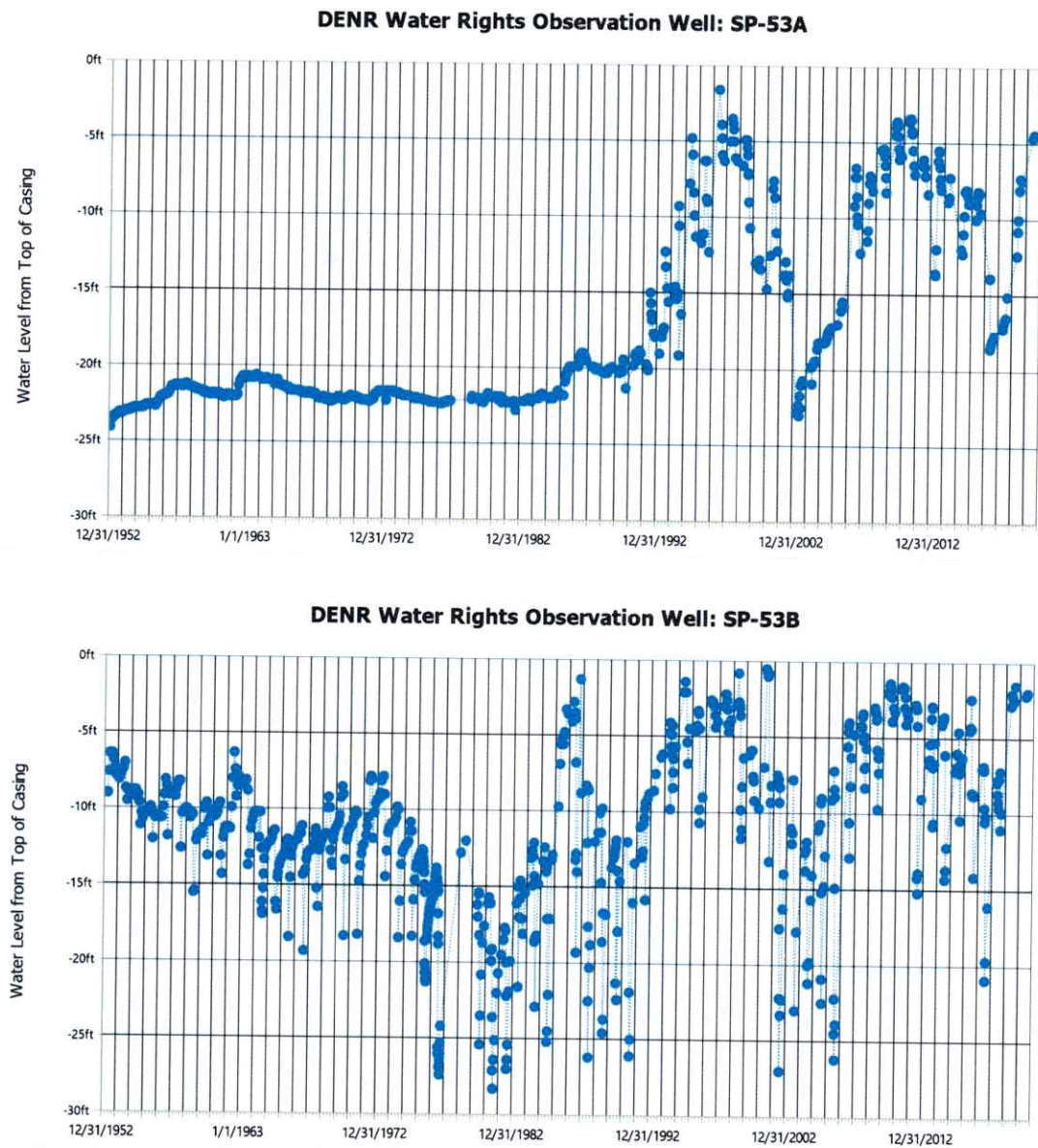
05/02/2013	7620-3	Permit approved by WMB	PE	136
05/02/2013	7575-3	Divided, 140 acres to 7575A-3, 140 acres to 7575B-3	OC	0
07/11/2013	7685-3	Permit approved by WMB	PE	75
07/11/2013	7716-3	Permit approved by WMB	PE	160
07/11/2013	7717-3	Permit approved by WMB	PE	135
07/11/2013	7718-3	Permit approved by WMB	PE	135
07/11/2013	7719-3	Permit approved by WMB	PE	135
07/11/2013	7720-3	Permit approved by WMB	PE	135
07/11/2013	7721-3	Permit approved by WMB	PE	100
07/11/2013	7722-3	Permit approved by WMB	PE	155
07/11/2013	7723-3	Permit approved by WMB	PE	300
07/11/2013	7724-3	Permit approved by WMB	PE	300
07/11/2013	7725-3	Permit approved by WMB	PE	135
07/11/2013	7725-3	7725-3 divided into approved and denied portions, 7725A-3 and 7725B-3	OC	0
07/11/2013	7725A-3	Approved portion of 7725-3	IP	0
07/11/2013	7858-3	Date received, WMB Denied at May 6-7 2015 meeting, 10-30-15 6th Judicial Court dismissed the appeal	DN	
07/11/2013	7859-3	Date received, WMB Denied at May 6-7 2015 meeting, 10-30-15 6th Judicial Court dismissed the appeal	DN	
07/11/2013	7860-3	Date received, WMB Denied at May 6-7 2015 meeting, 10-30-15 6th Judicial Court dismissed the appeal	DN	
07/11/2013	7861-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7864-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7865-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7866-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7867-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7868-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7869-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7870-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7871-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/12/2013	7872-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
07/23/2013	7885-3	Date received, recommended for denial, withdrawn 10-10-13	WI	
09/05/2013	7894-3	Date received, WMB Denied at May 6-7 2015 meeting, 10-30-15 6th Judicial Court dismissed the appeal	DN	
11/01/2013	7920-3	Date received, recommended for denial, withdrawn 1-24-14	WI	
11/01/2013	7979-3	Date received, recommended for denial, withdrawn 5-15-14	WI	
02/08/2014	7725B-3	Denied portion of 7725-3	DN	0
02/15/2014	7735-3	Date received, WMB Denied at 10-3-13 meeting, 8-21-14 6th Judicial Court affirmed the denial	DN	
02/21/2014	4794A-3	Date Received, Withdrawn 3-3-14	WI	

02/21/2014	7721A-3	Date received, withdrawn 3-3-14	WI	
04/28/2014	8013-3	Date received, WMB Denied at 10-22-14 meeting	DN	
05/07/2014	4134A-3	Permit approved by WMB, took 128 of 128 acres from 4134-3	PE	0
05/07/2014	4134-3	Incorporated into Water Right 4134A-3	IP	
05/27/2014	7718A-3	Permit approved by Chief Engineer, amends 7718-3 by moving acres and diversion	PE	0
05/27/2014	7718-3	Amended by Water Right 7718A-3	IP	0
06/30/2014	8034-3	Date Received, Recommended for Denial, Withdrawn 9-16-14	WI	
07/10/2014	4134-3	Cancelled due to 4134A-3 taking all acres and diversion	CA	0
08/25/2014	3321A-3	Permit approved by Chief Engineer, moved acres of 3321-3	PE	0
08/25/2014	3321-3	Incorporated into Water Right 3321A-3	LC	0
09/02/2014	782A-3	Permit approved by Chief Engineer, amends 782-3 by moving acres and diversion	PE	0
09/02/2014	782-3	Amended by 782A-3	IP	0
10/14/2014	7725C-3	Permit approved by Chief Engineer, amends 7725A-3 by moving acres and diversion	PE	0
10/14/2014	7725A-3	Incorporated into Water Right 7725C-3	IP	0
10/22/2014	1613-3	Cancelled by WMB for abandonment/forfeiture	CA	-130
12/24/2014	6201-3	Ownership Change into Water Right 6201C-3 and 6201D-3	OC	0
12/24/2014	6201C-3	Ownership Change, took 264 of 396 acres from 6201-3	LC	0
12/24/2014	6201D-3	Ownership Change, took 132 of 396 acres from 6201-3	LC	0
01/12/2015	3053A-3	Permit approved by Chief Engineer, took 130 of 152 acres of 3053-3	PE	-22
01/12/2015	3053-3	Amended by Water Right 3053A-3, transferred the irrigated acres (152? of 152 acres)	IP	0
02/25/2015	8083-3	Number 24 of 28 in the Random Selection Priority List	HD	
02/25/2015	8084-3	Number 10 of 28 in the Random Selection Priority List	HD	
02/25/2015	8085-3	Number 4 of 28 in the Random Selection Priority List	HD	
02/25/2015	8099-3	Number 13 of 28 in the Random Selection Priority List	HD	
02/25/2015	8100-3	Number 19 of 28 in the Random Selection Priority List	HD	
02/25/2015	8101-3	Number 2 of 28 in the Random Selection Priority List	HD	
02/25/2015	8102-3	Number 16 of 28 in the Random Selection Priority List	HD	
02/25/2015	8103-3	Number 9 of 28 in the Random Selection Priority List	HD	
02/25/2015	8104-3	Number 27 of 28 in the Random Selection Priority List	HD	
02/25/2015	8105-3	Number 11 of 28 in the Random Selection Priority List	HD	
02/25/2015	8106-3	Number 8 of 28 in the Random Selection Priority List	HD	
02/25/2015	8107-3	Number 22 of 28 in the Random Selection Priority List	HD	
02/25/2015	8108-3	Number 17 of 28 in the Random Selection Priority List	HD	
02/25/2015	8109-3	Number 25 of 28 in the Random Selection Priority List	HD	
02/25/2015	8110-3	Number 18 of 28 in the Random Selection Priority List	HD	
02/25/2015	8111-3	Number 14 of 28 in the Random Selection Priority List	HD	
02/25/2015	8120-3	Number 5 of 28 in the Random Selection Priority List	HD	
02/25/2015	8121-3	Number 20 of 28 in the Random Selection Priority List	HD	

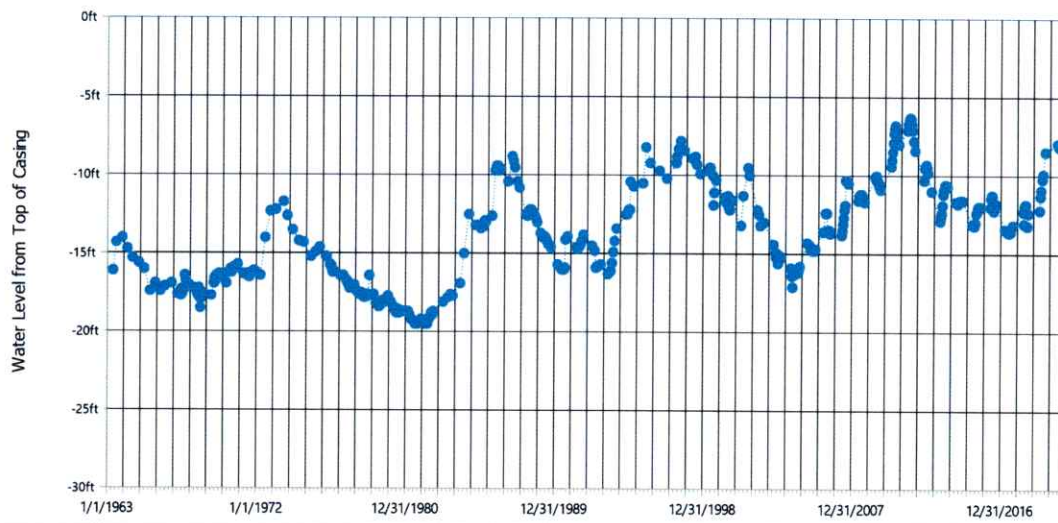
02/25/2015	8122-3	Number 23 of 28 in the Random Selection Priority List	HD	
02/25/2015	8128-3	Number 1 of 28 in the Random Selection Priority List	HD	
02/25/2015	8129-3	Number 12 of 28 in the Random Selection Priority List	HD	
02/25/2015	8130-3	Number 21 of 28 in the Random Selection Priority List	HD	
02/25/2015	8131-3	Number 6 of 28 in the Random Selection Priority List	HD	
02/25/2015	8132-3	Number 28 of 28 in the Random Selection Priority List	HD	
02/25/2015	8133-3	Number 15 of 28 in the Random Selection Priority List	HD	
02/25/2015	8135-3	Number 26 of 28 in the Random Selection Priority List	HD	
02/25/2015	8137-3	Number 3 of 28 in the Random Selection Priority List	HD	
02/25/2015	8138-3	Number 7 of 28 in the Random Selection Priority List	HD	
03/25/2015	7570A-3	Date received, permit was issued but later deemed invalid	WI	
05/07/2015	2078A-3	Permit approved by Chief Engineer, moved 132 of 924 acres of Water Right License 2078-3	PE	0
07/06/2015	7571A-3	Permit approved by Chief Engineer, amends 7571-3 by moving acres and diversion	PE	0
07/06/2015	7571-3	Amended by Water Right 7571A-3, transferred acres and diversion to other land	IP	0
07/27/2015	4794B-3	Permit approved by Chief Engineer, moved 28 acres of 4794-3, incorporated 4794-3	PE	0
07/27/2015	7573A-3	Permit approved by Chief Engineer, took 24 acres from 7573-3 and incorporated 4723-3A	PE	0
07/27/2015	7573-3	Reissued Permit for 136 of 160 acres, 7573A-3 transferred 24 acres	PE	0
07/27/2015	4794C-3	Permit approved by Chief Engineer, took 20 acres from 4794-3 and incorporated 104 acres of 3317A-3	PE	0
07/27/2015	4723-3A	Incorporated into Water Right 7573A-3	IP	0
07/27/2015	4794-3	Amended, 4794B-3 moved 28 acres, 4794C-3 transferred 20 acres	IP	0
07/27/2015	3317A-3	Incorporated into Water Right 4794C-3	IP	0
08/31/2015	7620A-3	Permit approved by Chief Engineer, took 72 acres from 7620-3	PE	0
08/31/2015	7620B-3	Permit approved by Chief Engineer, took 64 acres from 7620-3	PE	0
08/31/2015	7620-3	Divided, 72 acres to 7620A-3, 64 acres to 7620B-3	IP	0
09/08/2015	7572A-3	Date received, withdrawn	WI	
11/09/2015	7572B-3	Permit approved by Chief Engineer, amends 7572-3 by moving acres and diversion	PE	0
11/09/2015	7572-3	Amended by Water Right 7572B-3, transferred acres and diversion to other land	IP	0
02/01/2016	7293-3	Result of Licensing (135 to 135 acres)	LC	0
02/01/2016	7373-3	Result of Licensing (160 to 152 acres)	LC	-8
02/24/2016	4794C-3	Result of Licensing (124 to 124 acres)	LC	0
03/03/2016	3243-3	Cancelled by WMB for abandonment/forfeiture	CA	-89
06/29/2016	7292-3	Result of Licensing (135 + 132 (6339B-3) to 266 acres)	LC	-1
06/29/2016	6339B-3	Incorporated all 132 acres into Water Right 7292-3	IL	0
06/29/2016	7292-3	Divided, 133 acres to 7292A-3, 133 acres to 7292B-3	IL	0
06/29/2016	7292A-3	Took 133 of 266 acres from 7292-3	LC	0
06/29/2016	7292B-3	Took 133 of 266 acres from 7292-3	LC	0
09/06/2016	7685-3	Result of Licensing (75 to 75 acres)	LC	0
09/12/2016	7289-3	Result of Licensing (270 to 270 acres)	LC	0

09/12/2016	6343A-3	Ownership Change, took 132 of 264 acres from 6343-3	LC	0
09/12/2016	6343B-3	Ownership Change, took 132 of 264 acres from 6343-3	LC	0
09/12/2016	6343-3	Ownership Change, 132 acres to 6343A-3 and 132 acres to 6343B-3	OC	0
10/11/2016	7718A-3	Result of Licensing (135 to 135 acres)	LC	0
10/24/2016	4134A-3	Result of licensing (128 to 128 acres)	LC	0
06/18/2018	7723A-3	Date received, withdrawn 7-17-18	WI	
12/20/2018	7639-3	Result of Licensing (135 to 135 acres)	LC	0
12/20/2018	4794B-3	Result of Licensing (244 + 135 (7719-3) to 278 acres)	LC	-101
12/20/2018	7719-3	Incorporated into Water Right 4794B-3	IL	0
05/22/2019	4622A-3	Result of Licensing (130 to 130 acres)	LC	0
06/27/2019	3321A-3	Result of Licensing (120 to 120 acres)	LC	0
06/27/2019	2078A-3	Result of Licensing (132 to 132 acres)	LC	0
06/27/2019	2078-3	License reissued for 792 acres	LC	0
01/08/2020	7570-3	Result of Licensing (280 to 259 acres)	LC	-21
01/08/2020	7571A-3	Result of Licensing (160 + 135 (7717-3) to 270 acres)	LC	-25
01/08/2020	7717-3	Incorporated into Water Right 7571A-3	IL	0
02/24/2020	7290-3	Result of Licensing (135 to 135 acres)	LC	0
02/24/2020	7291-3	Result of Licensing (135 to 135 acres)	LC	0
02/24/2020	7573-3	Result of Licensing (136 to 134 acres)	LC	-2
02/24/2020	7574-3	Result of Licensing (160 + 140 (7575A-3) to 268 acres)	LC	-32
02/24/2020	7575B-3	Result of Licensing (140 to 134 acres)	LC	-6
02/24/2020	7725C-3	Result of Licensing (135 to 135 acres)	LC	0
02/24/2020	7573A-3	Result of Licensing (160 to 156 acres)	LC	-4
02/24/2020	7572B-3	Result of Licensing (140 to 135 acres)	LC	-5
02/24/2020	7575A-3	Result of Licensing, Incorporated into Water Right 7574-3	IL	0
03/09/2020	7637-3	Result of Licensing (135 to 135 acres)	LC	0
03/09/2020	7720-3	Result of Licensing (135 to 135 acres)	LC	0
03/13/2020	7640-3	Result of Licensing (160 to 158 acres)	LC	-2
03/25/2020	7551-3	Result of Licensing (90 + 136 (470A-3) to 219 acres)	LC	-7
03/25/2020	782A-3	Result of Licensing (160 to 136 acres)	LC	-24
03/25/2020	470A-3	Incorporated into Water Right 7551-3	IL	0
03/25/2020	472A-3	Result of Licensing (160 to 140 acres)	LC	-20
05/26/2020	6333A-3	Result of Licensing (100 + 157 (6330A-3) to 215 acres)	LC	-42
05/26/2020	7723-3	Result of Licensing (300 + 155 (7722-3) to 405 acres)	LC	-50
05/26/2020	6330A-3	Incorporated into Water Right 6333A-3	IL	0
05/26/2020	7722-3	Incorporated into Water Right 7723-3	IL	0
06/01/2020	7724-3	Result of Licensing (300 to 300 acres)	LC	0
09/09/2020	7716-3	Result of Licensing (160 to 135 acres)	LC	-25

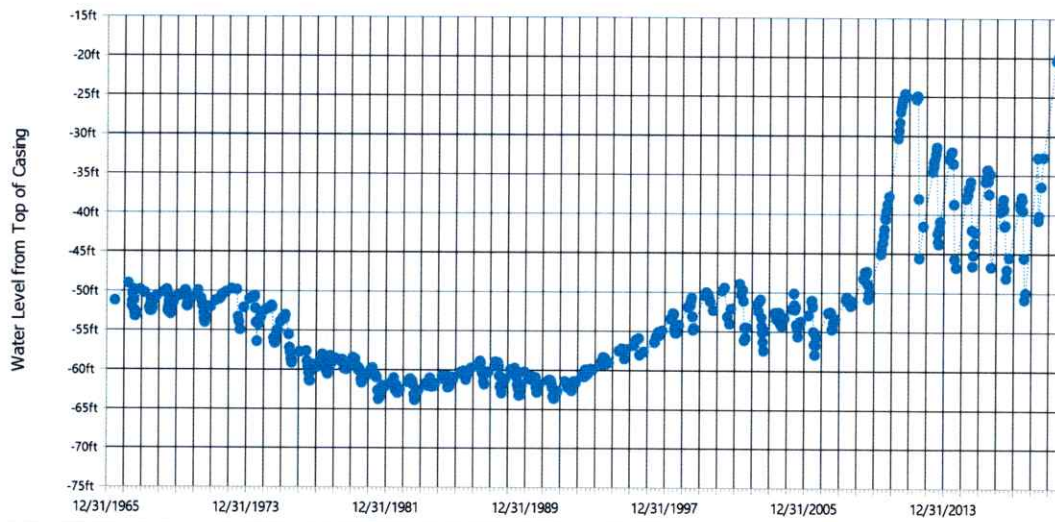
Appendix B: SD DENR-Water Rights Program Tulare: Western Spink Hitchcock aquifer observation well hydrographs (Water Rights, 2020b).



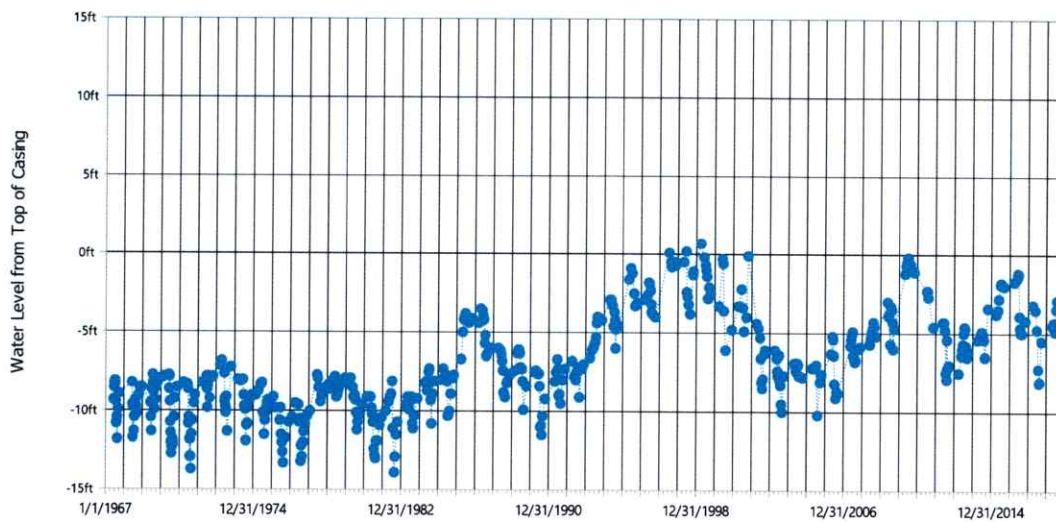
DENR Water Rights Observation Well: BD-63C



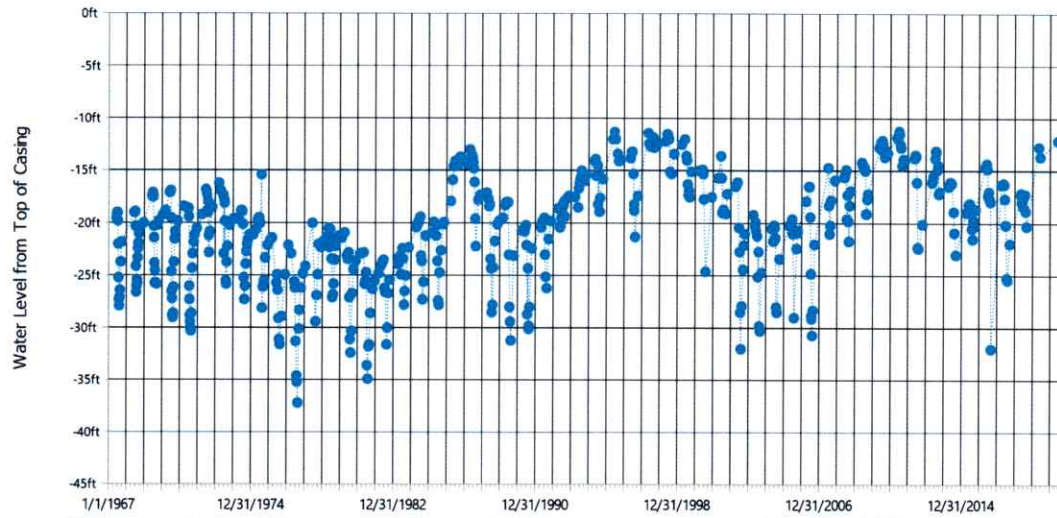
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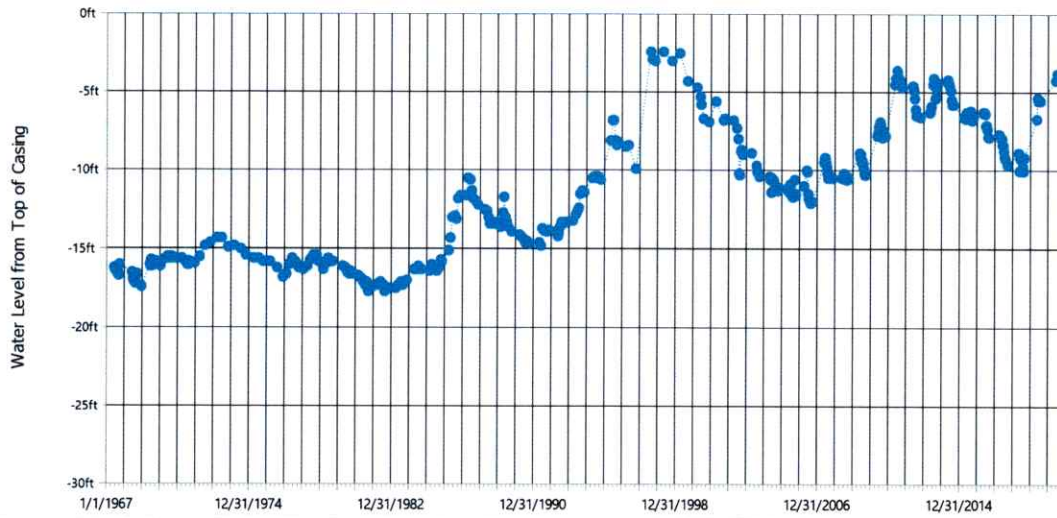
DENR Water Rights Observation Well: SP-66G



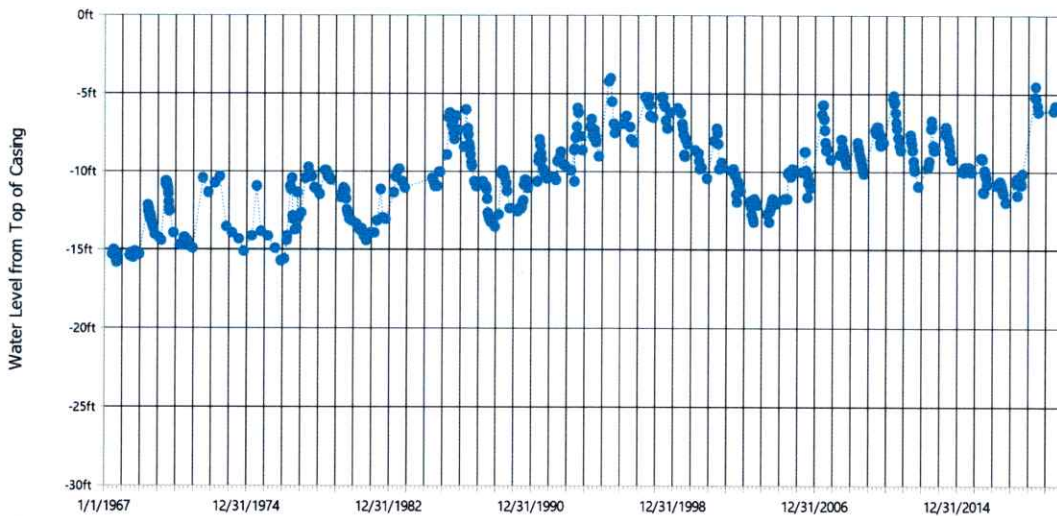
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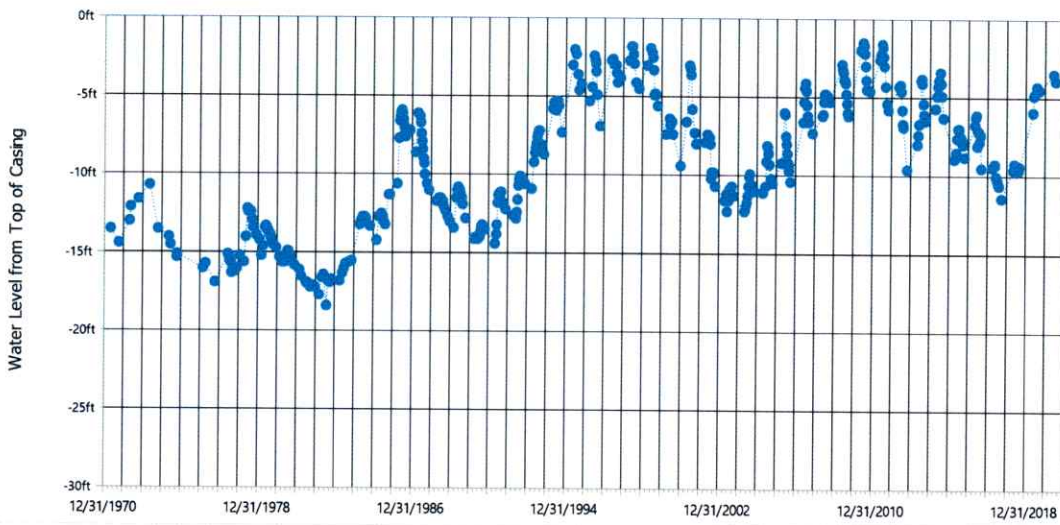
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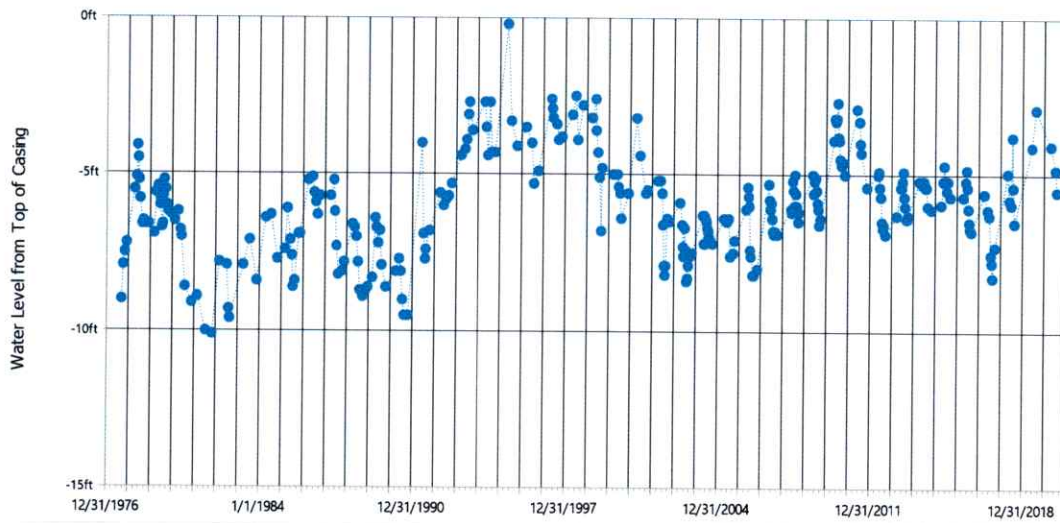
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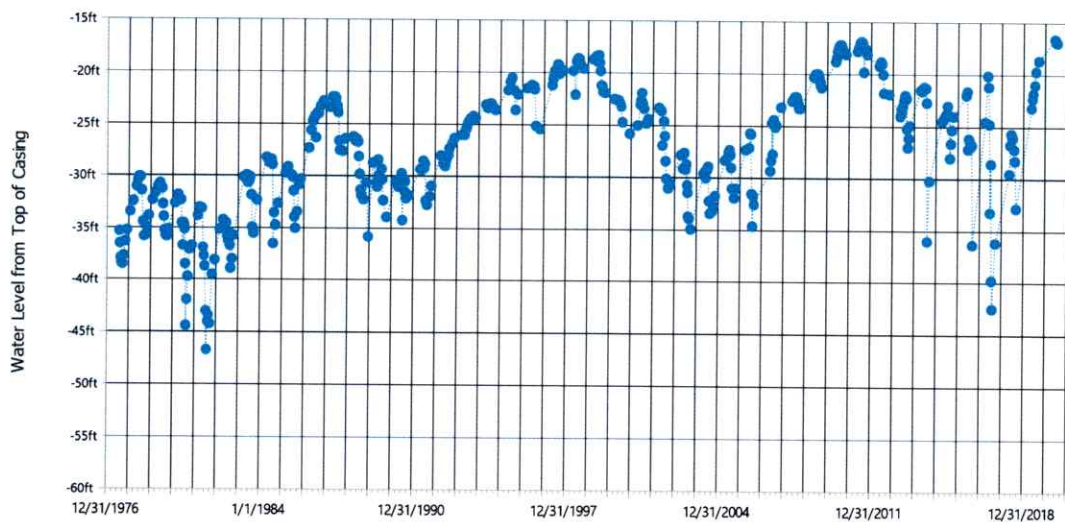
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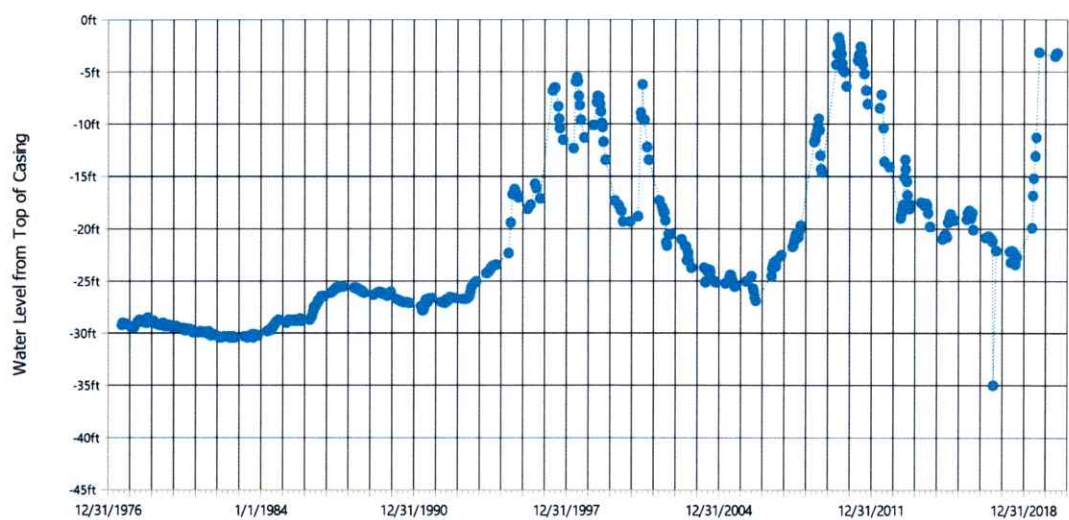
DENR Water Rights Observation Well: HD-73Q



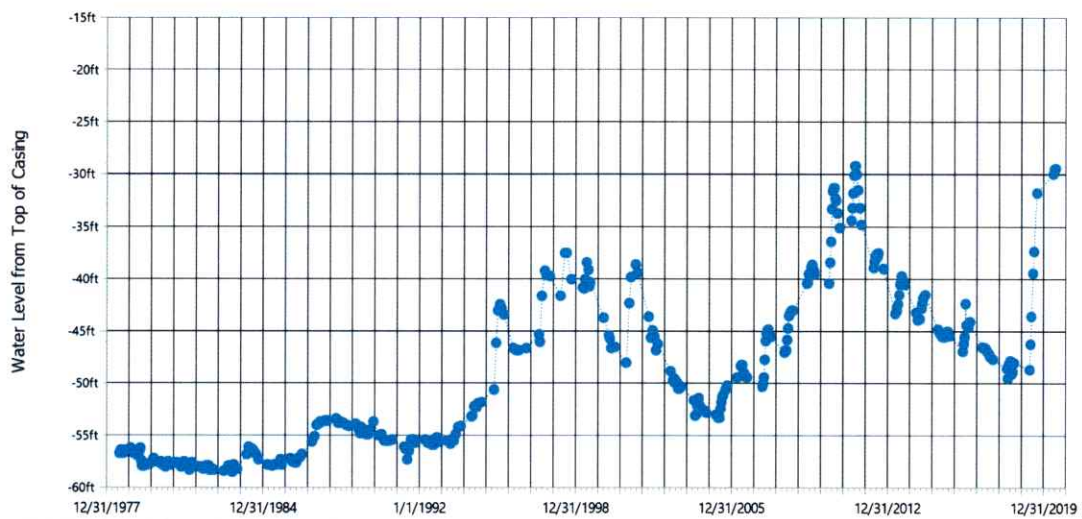
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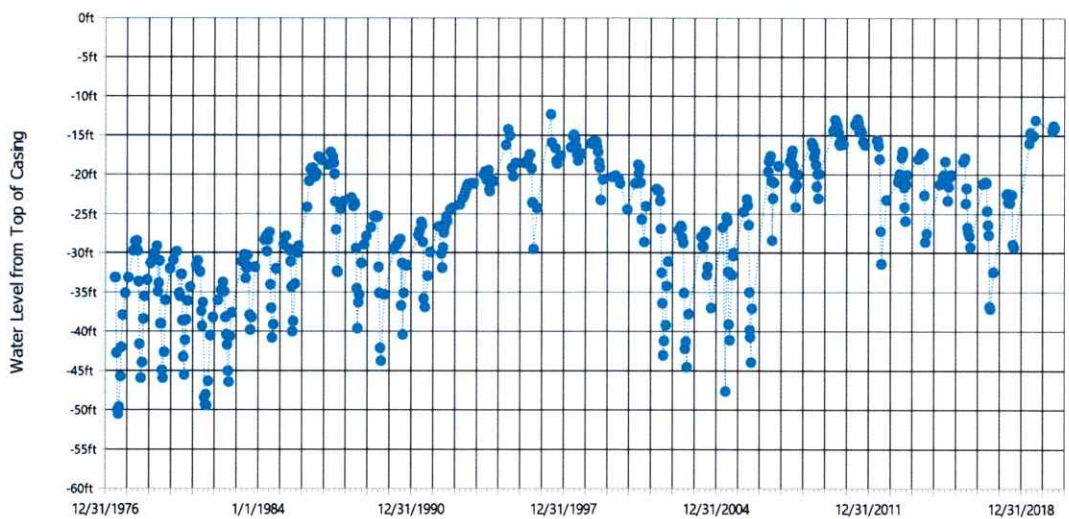
DENR Water Rights Observation Well: BD-77A



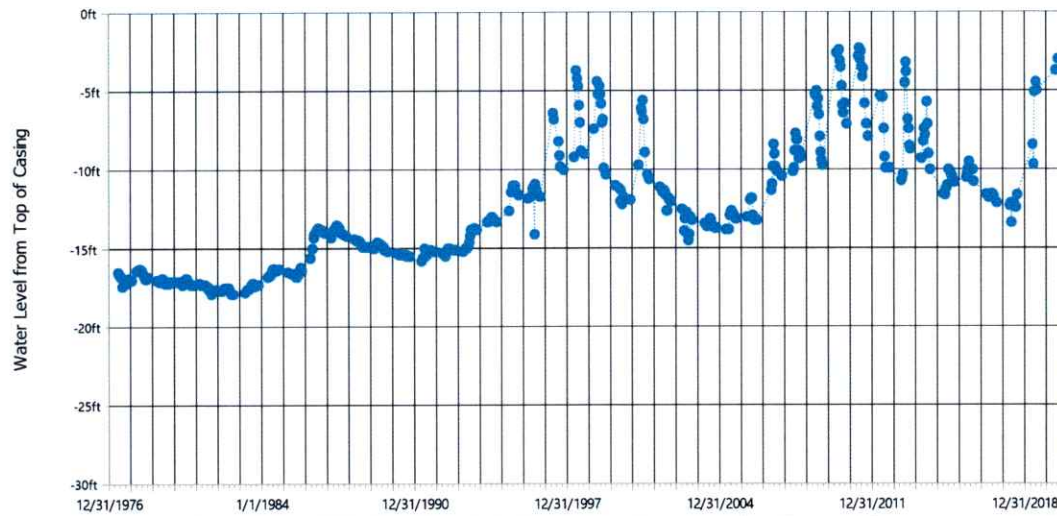
DENR Water Rights Observation Well: BD-77K



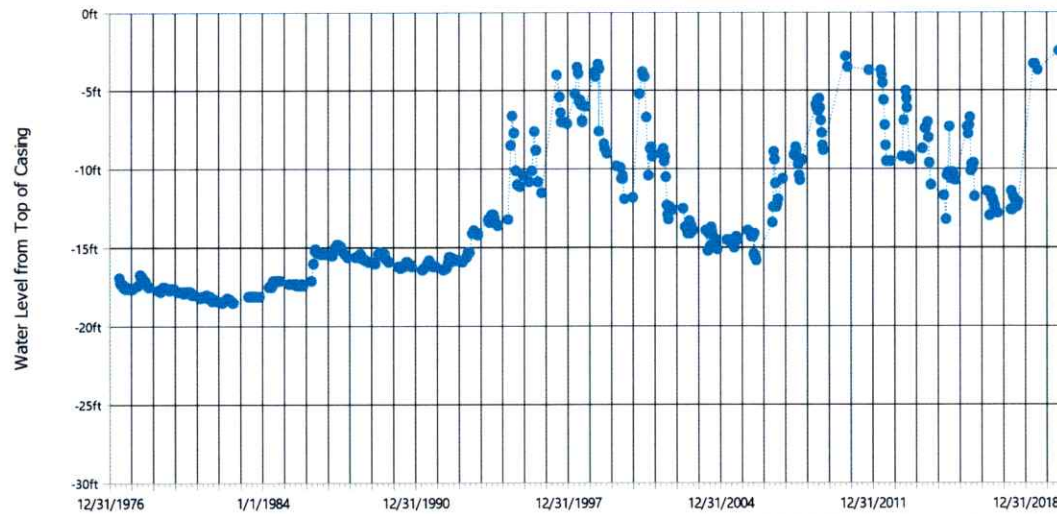
DENR Water Rights Observation Well: SP-77G



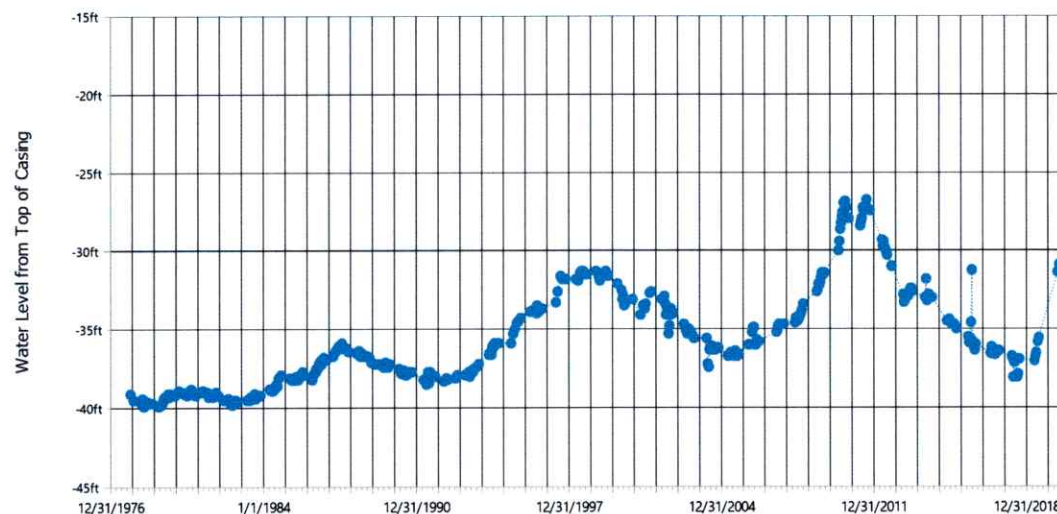
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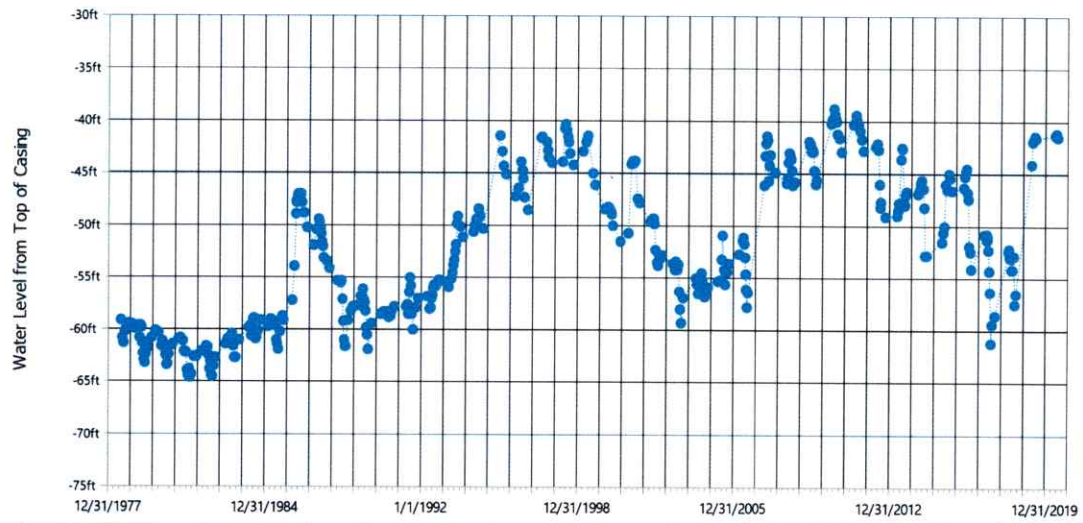
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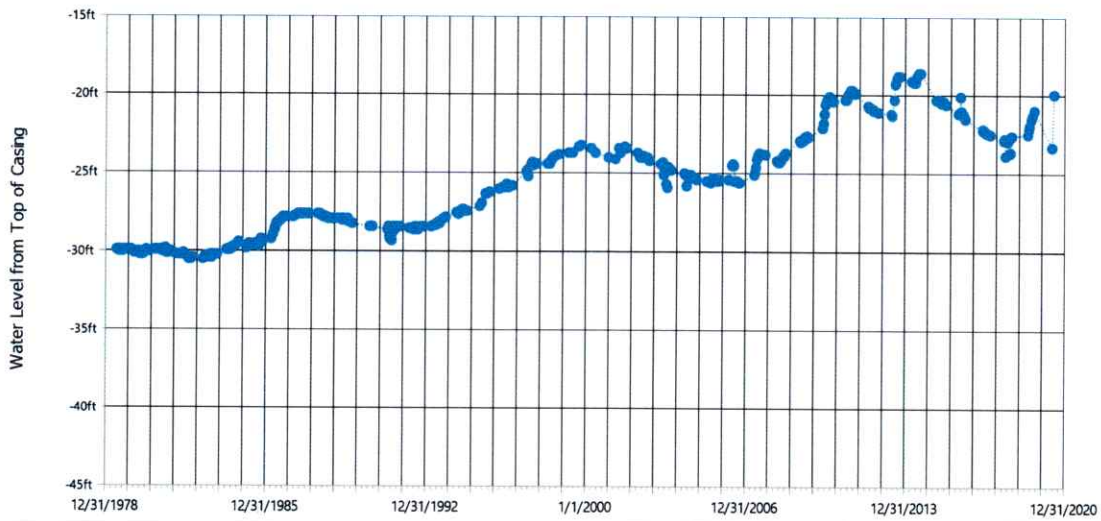
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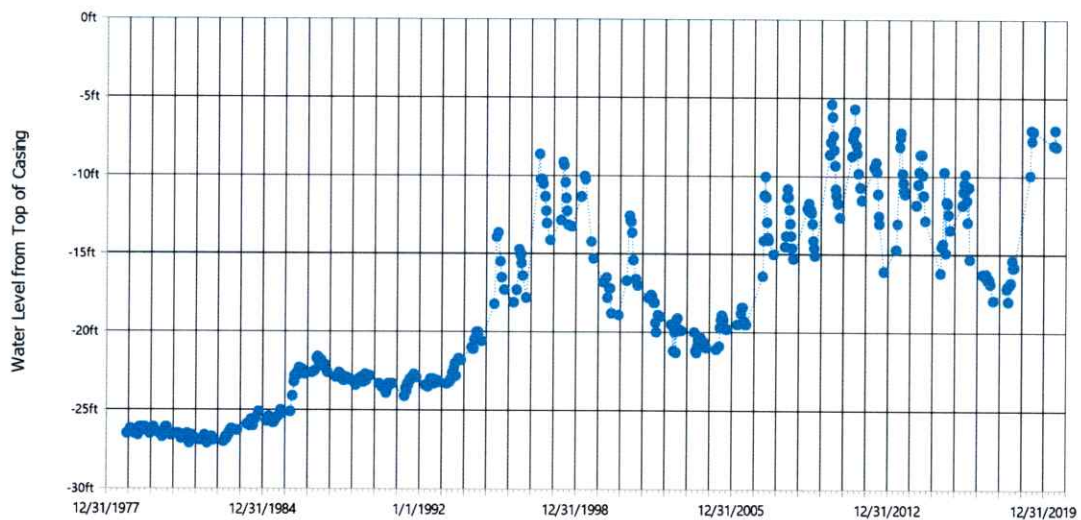
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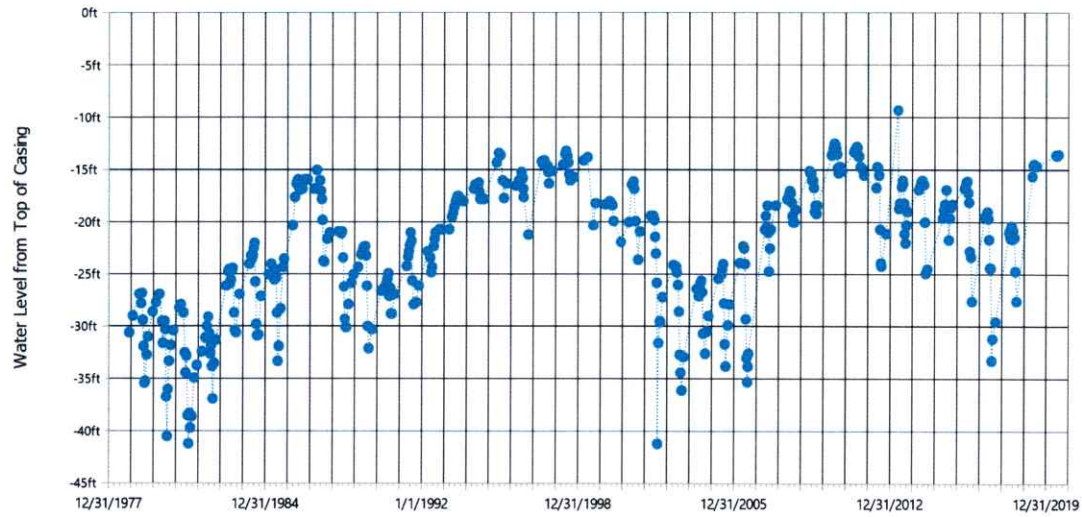
DENR Water Rights Observation Well: SP-78B



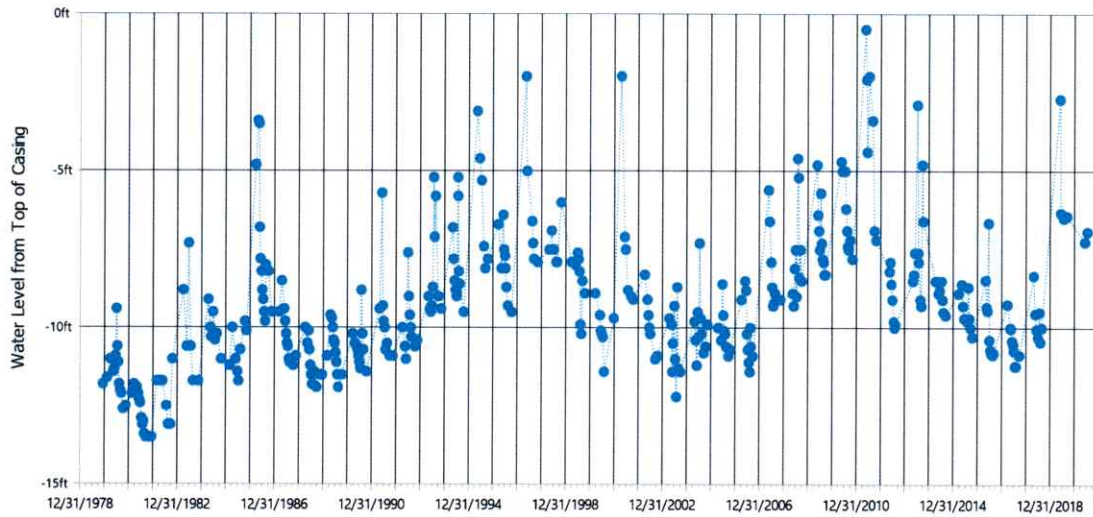
DENR Water Rights Observation Well: SP-78C



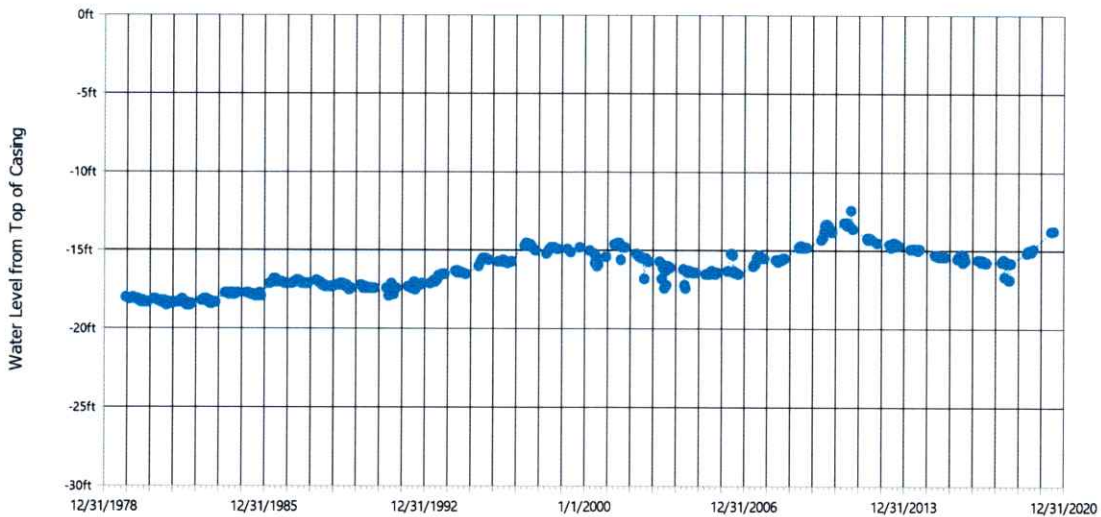
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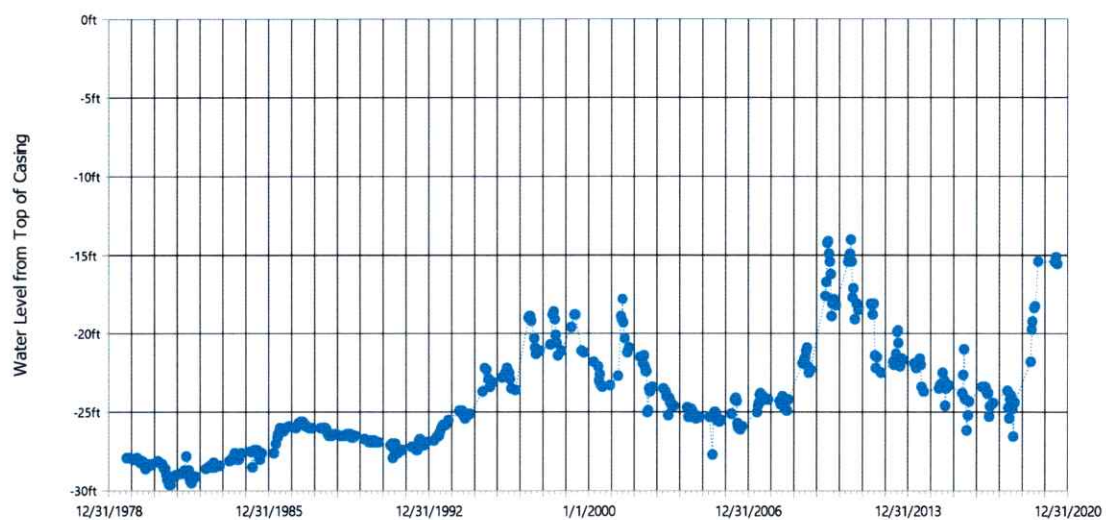
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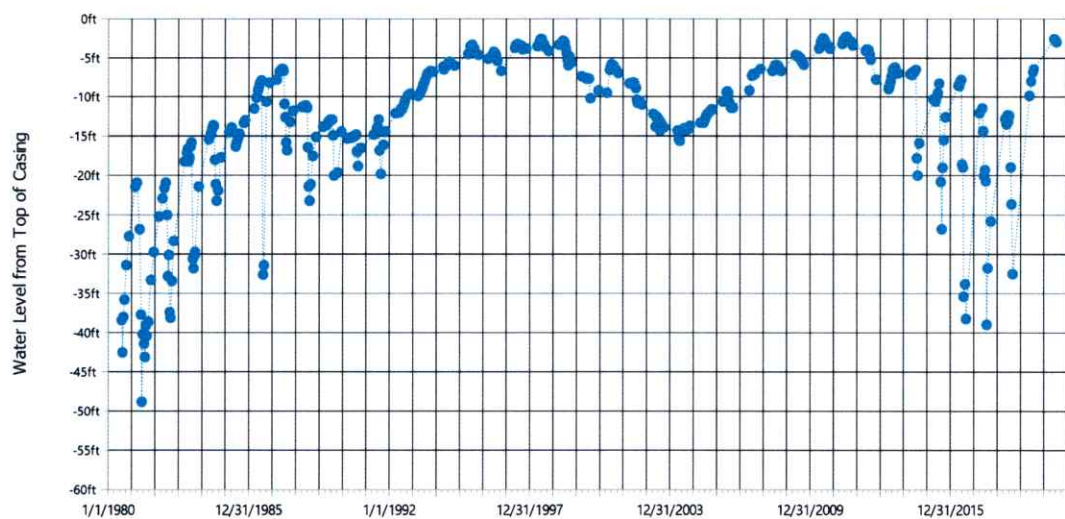
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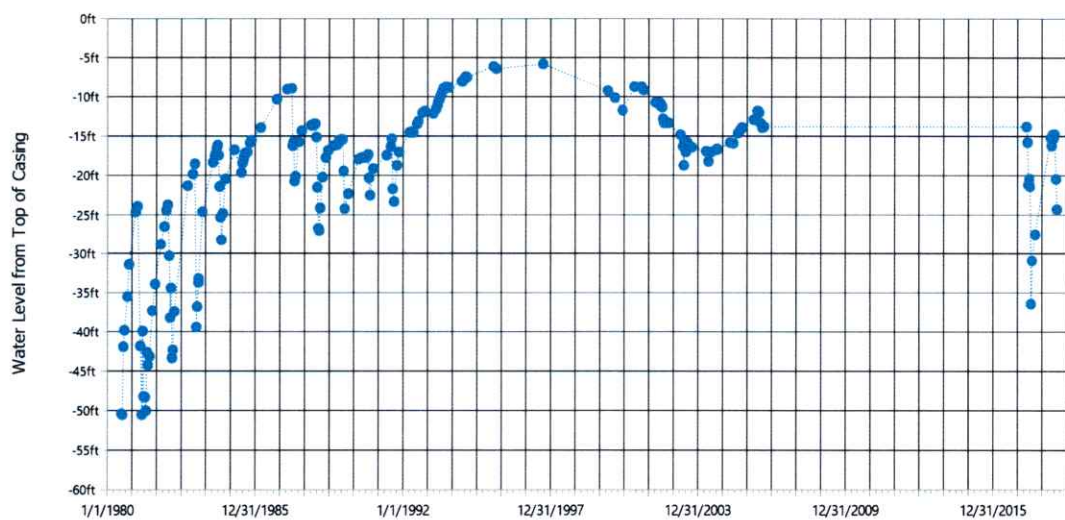
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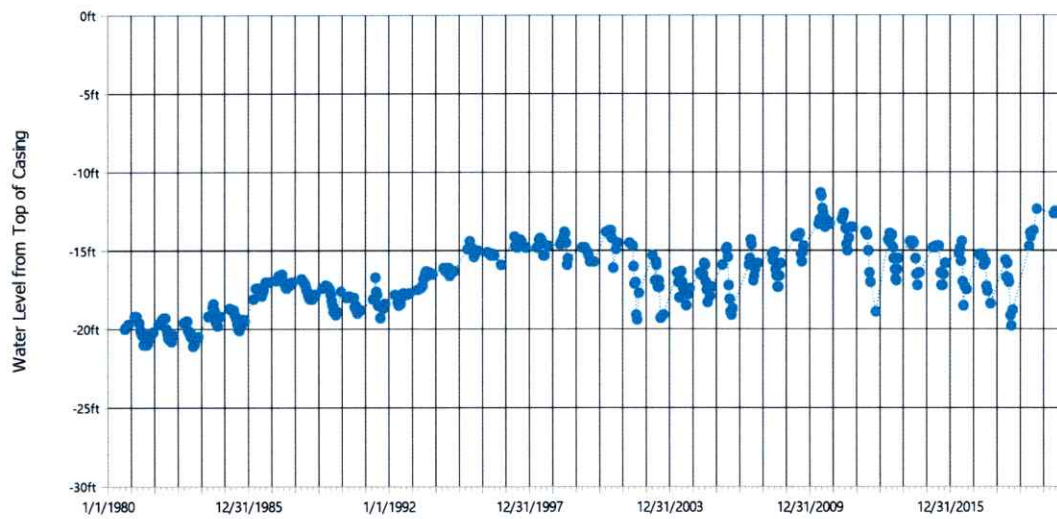
DENR Water Rights Observation Well: BD-80A



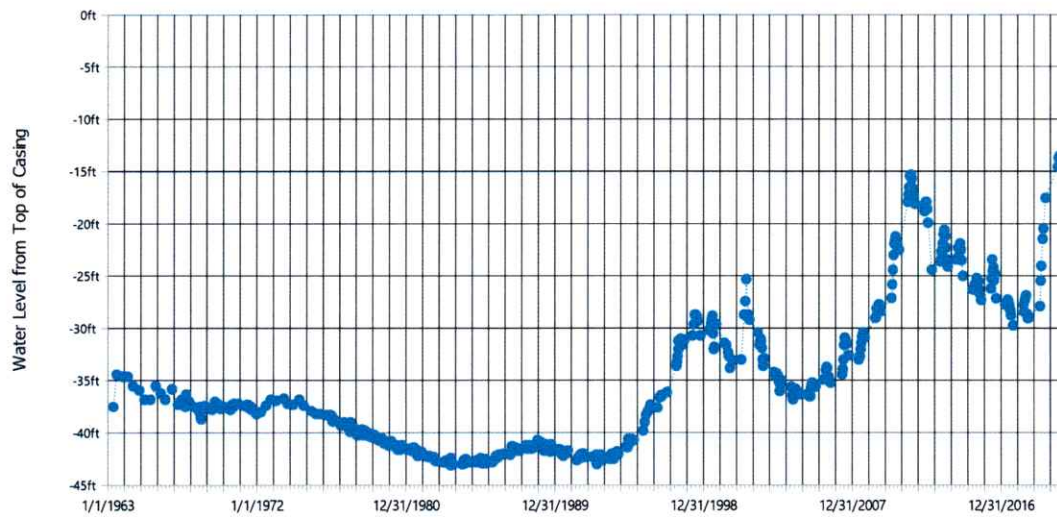
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DENR Water Rights Observation Well: BD-80C



DENR Water Rights Observation Well: BD-80D



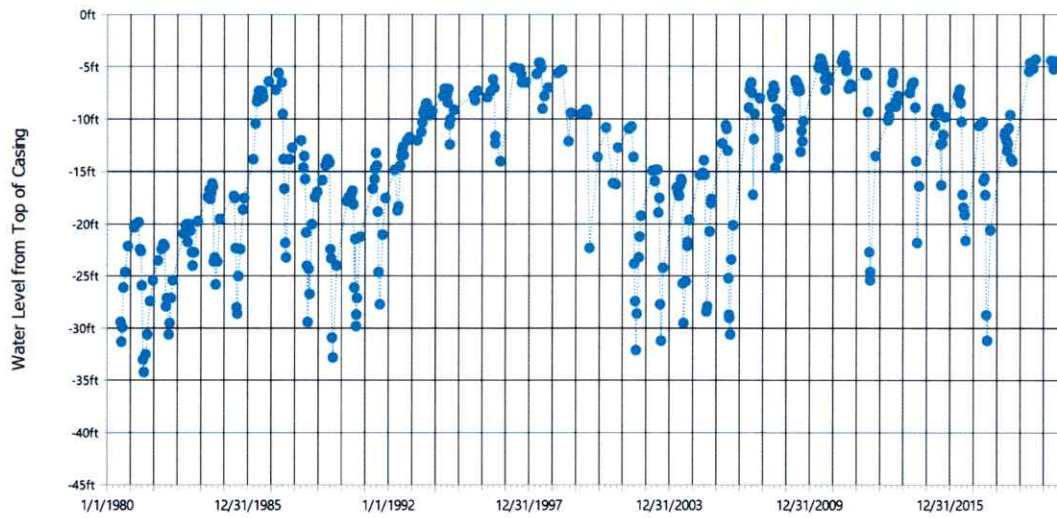
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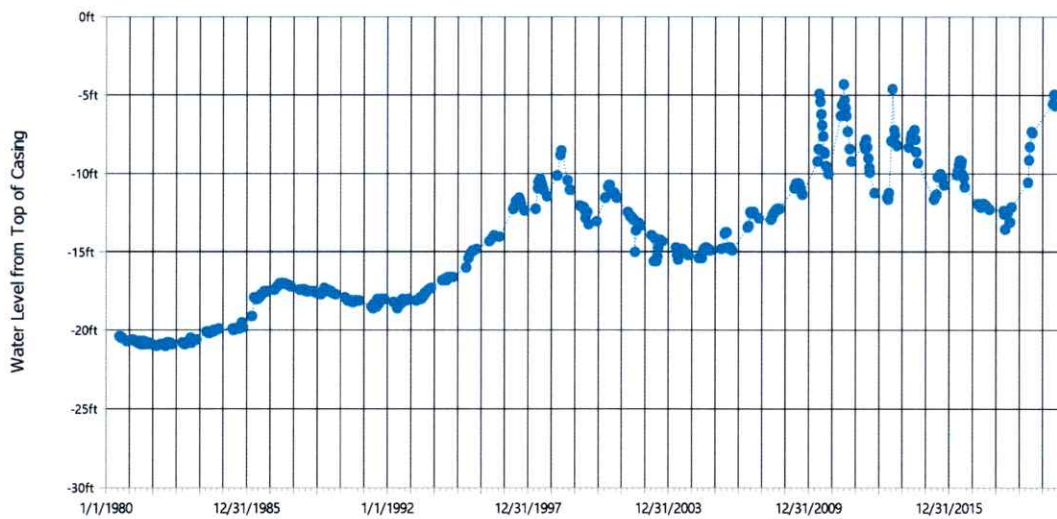
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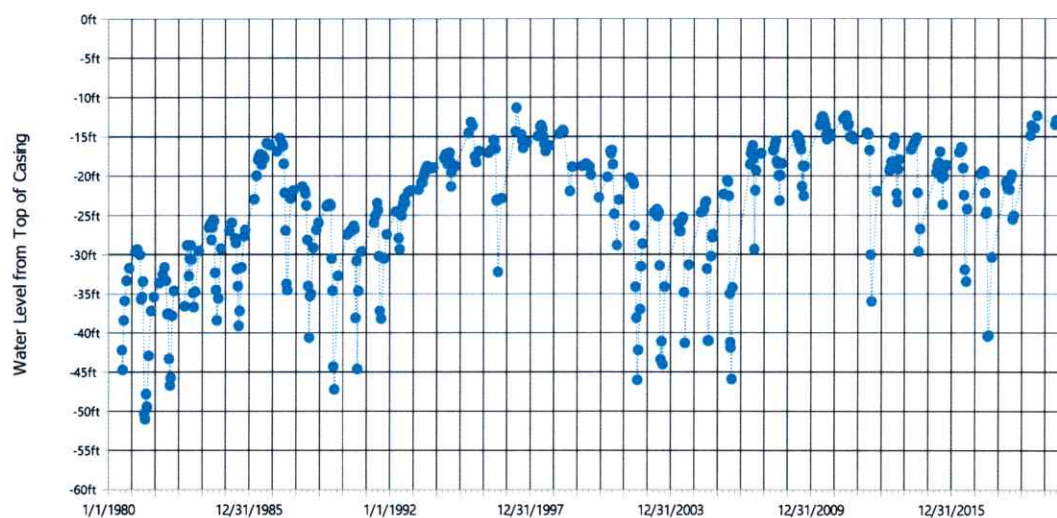
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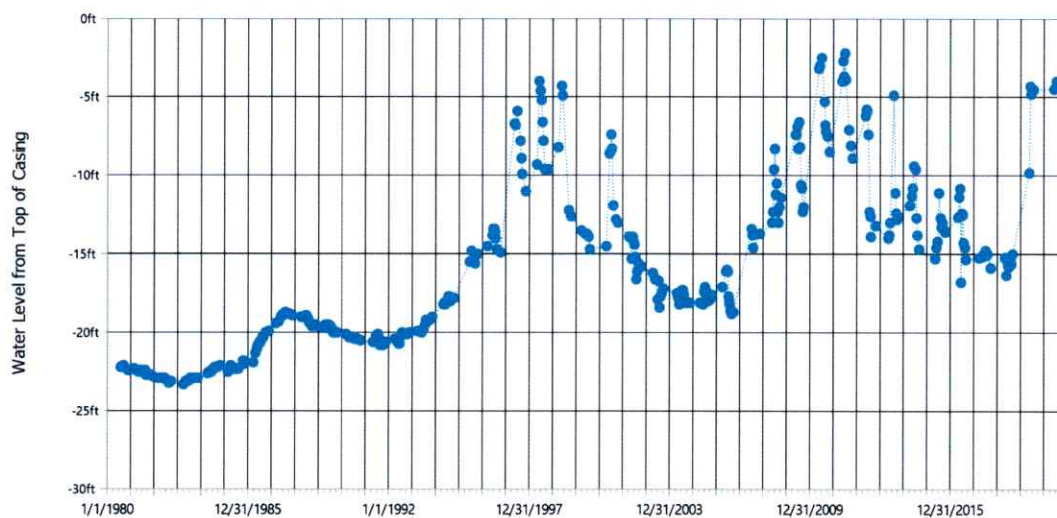
DENR Water Rights Observation Well: SP-80B



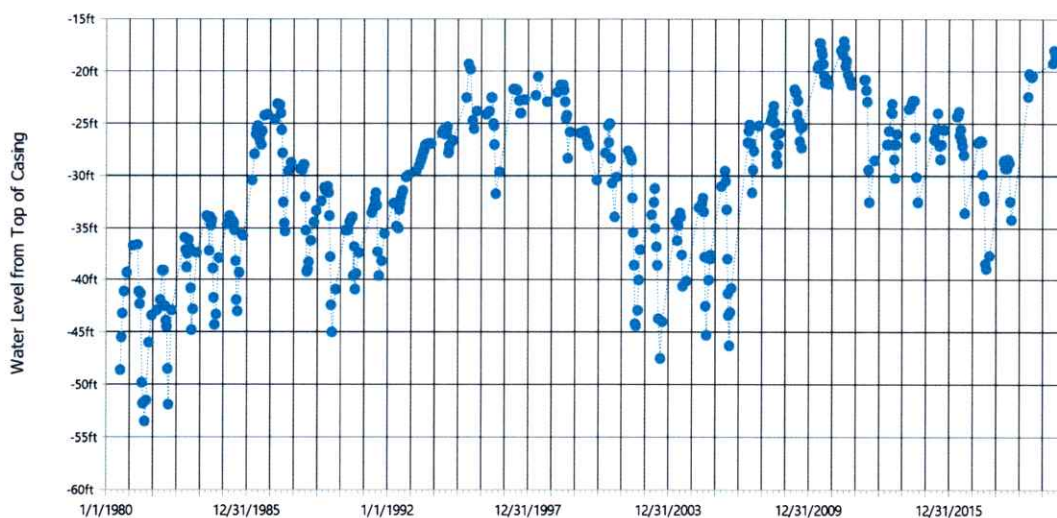
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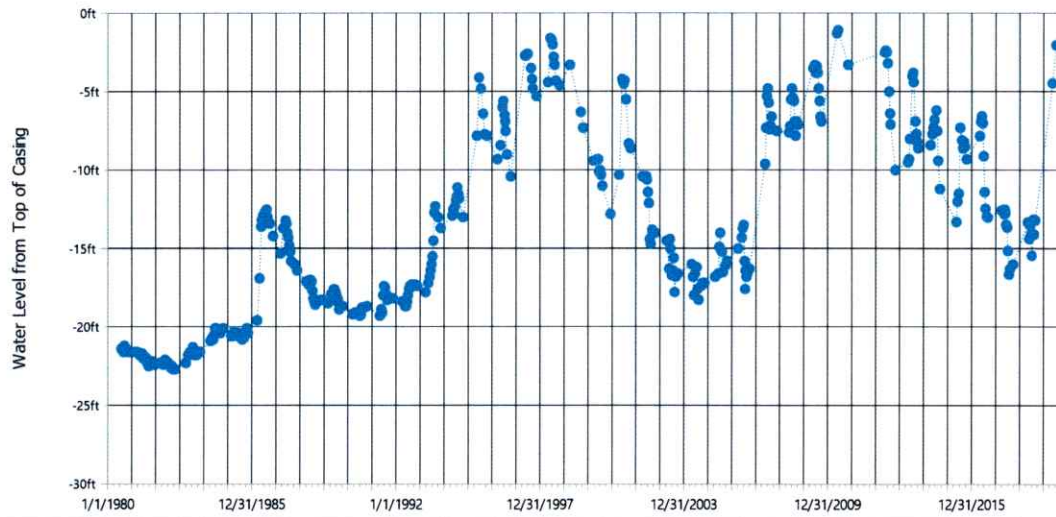
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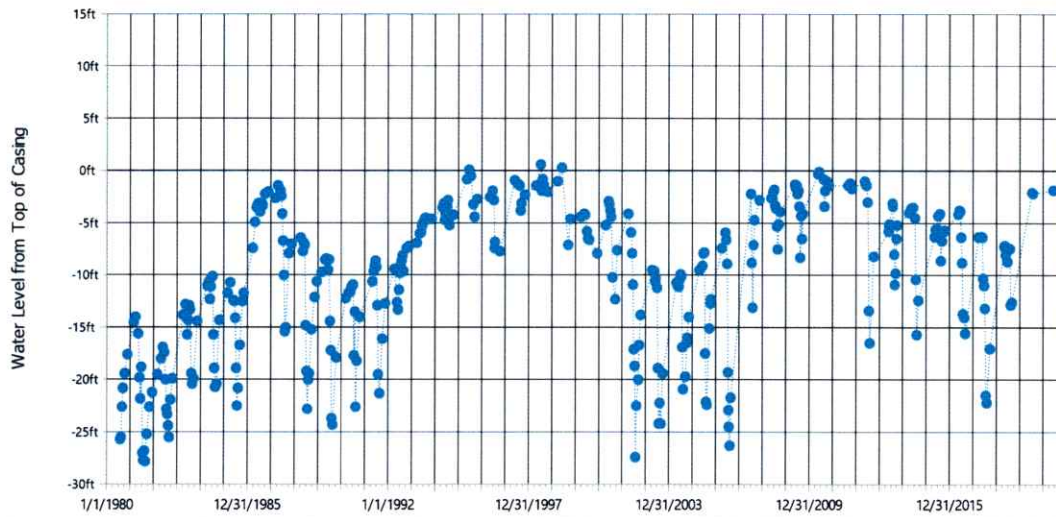
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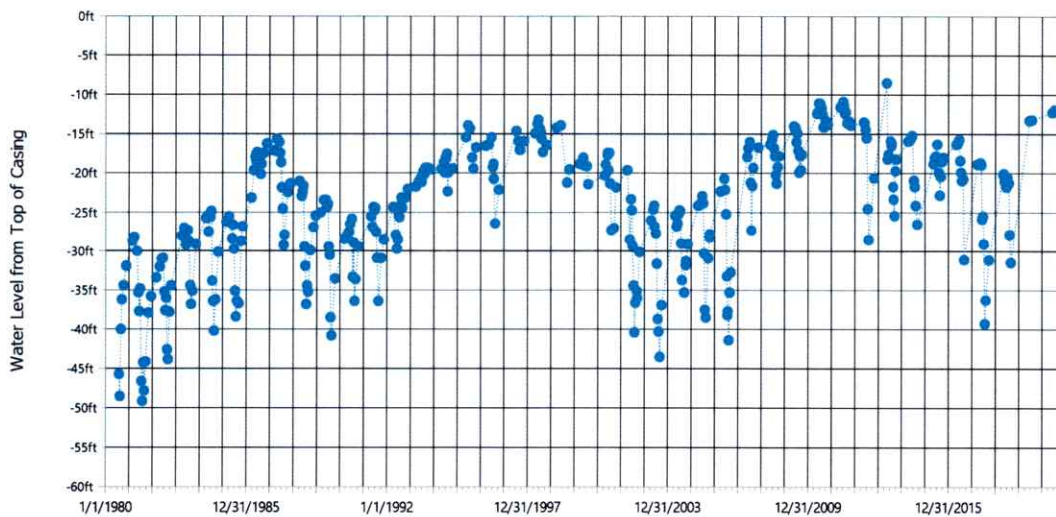
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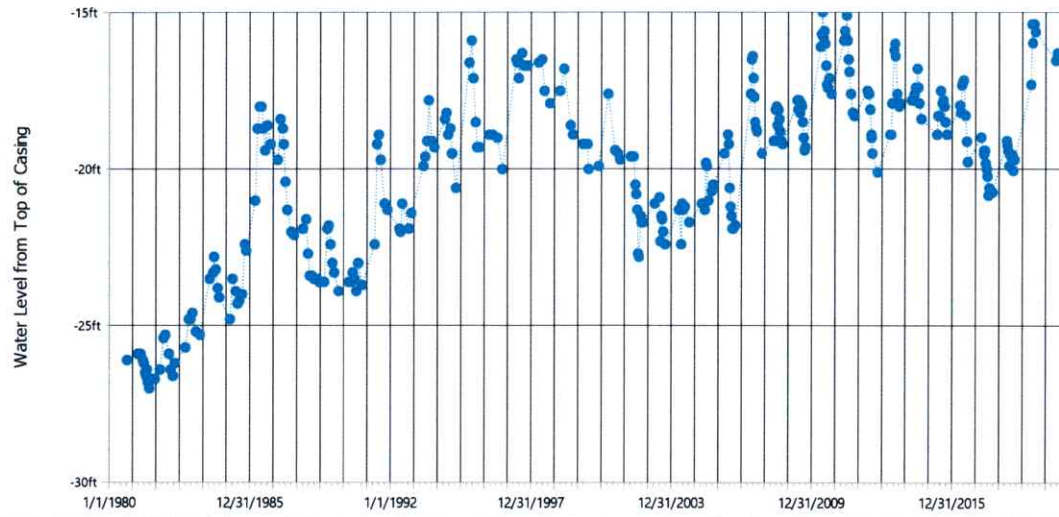
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DENR Water Rights Observation Well: SP-80H



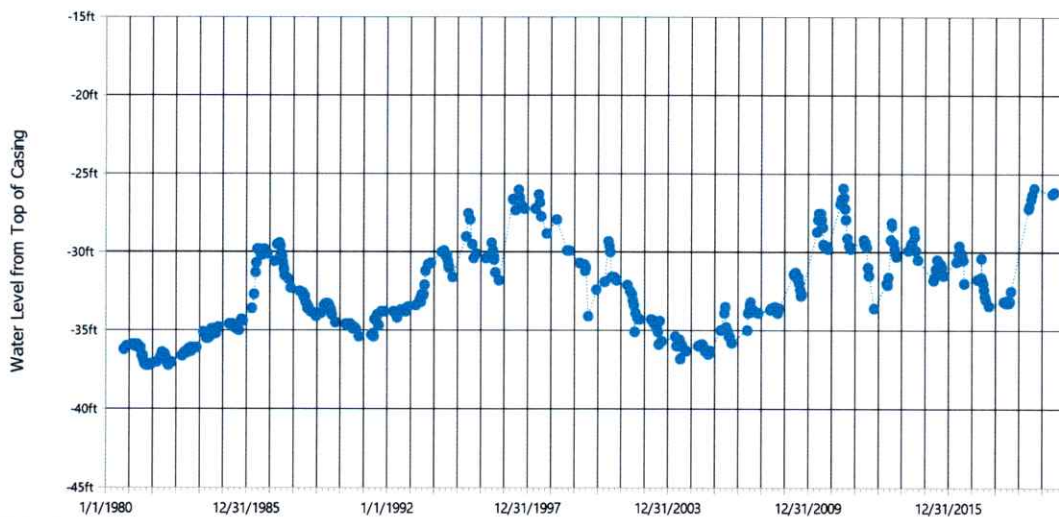
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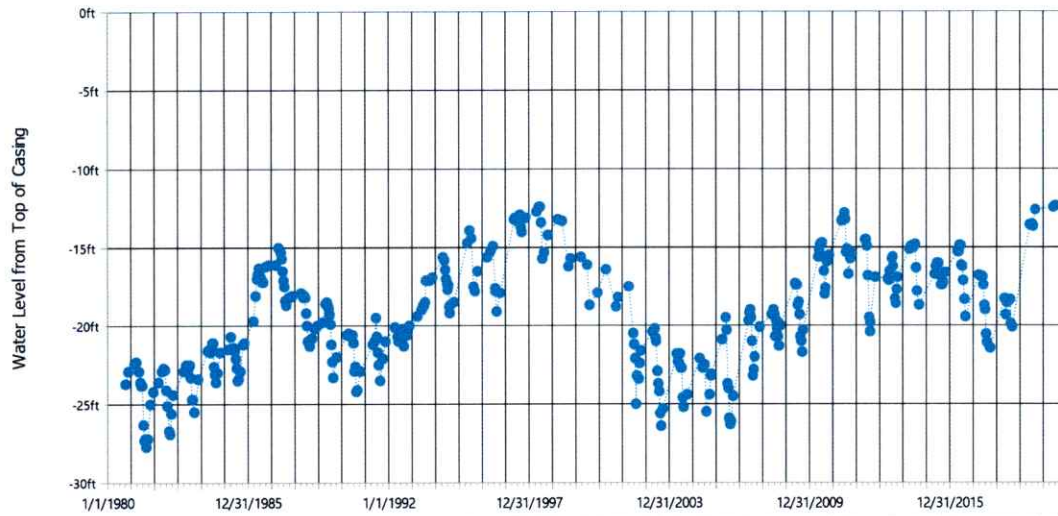
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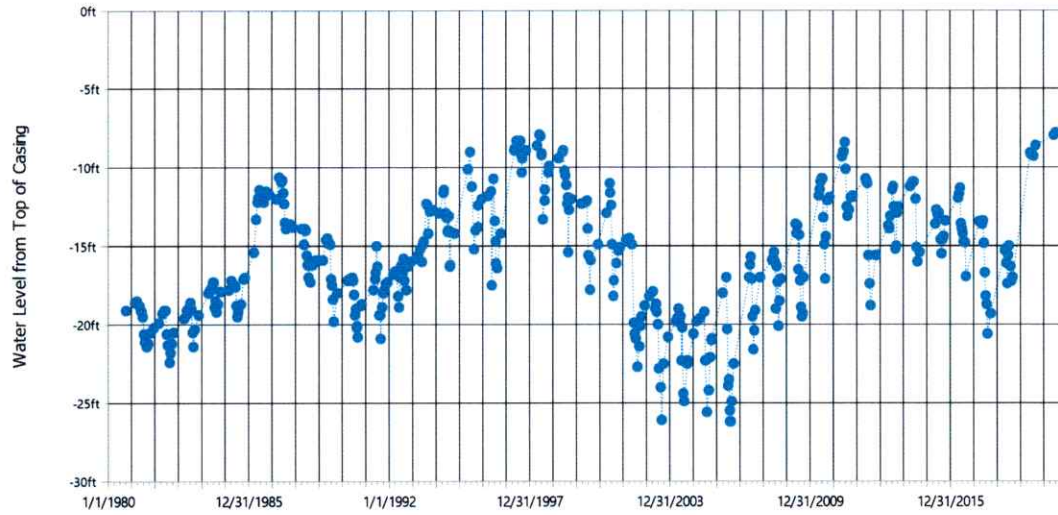
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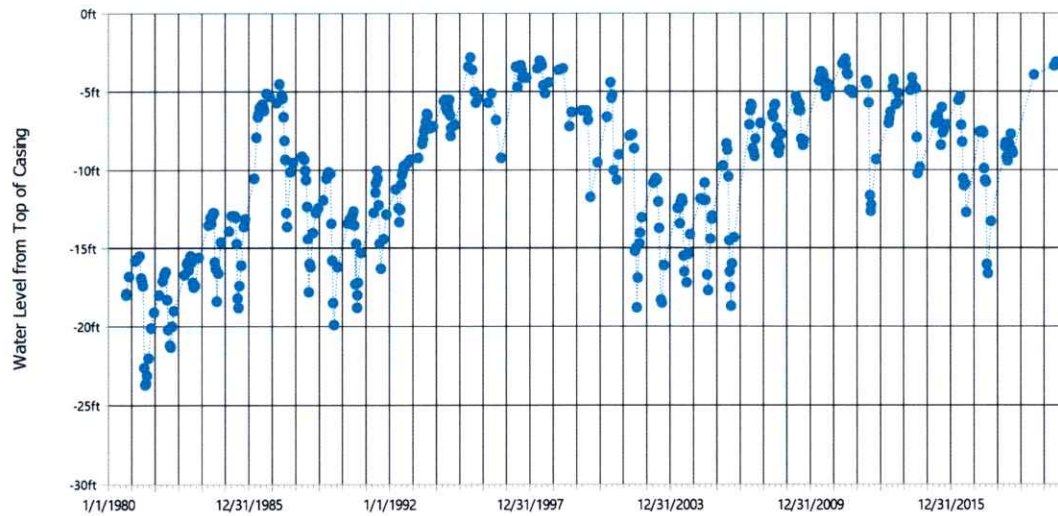
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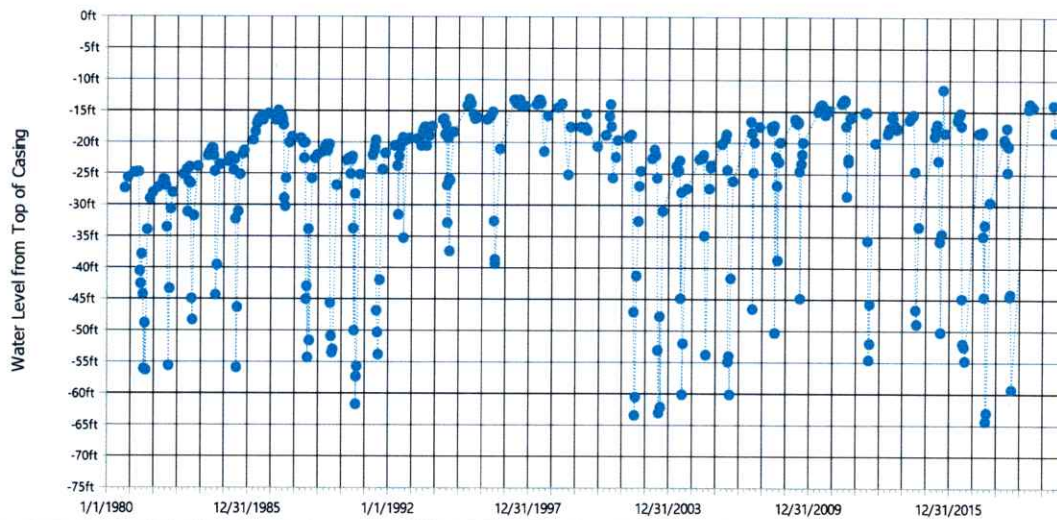
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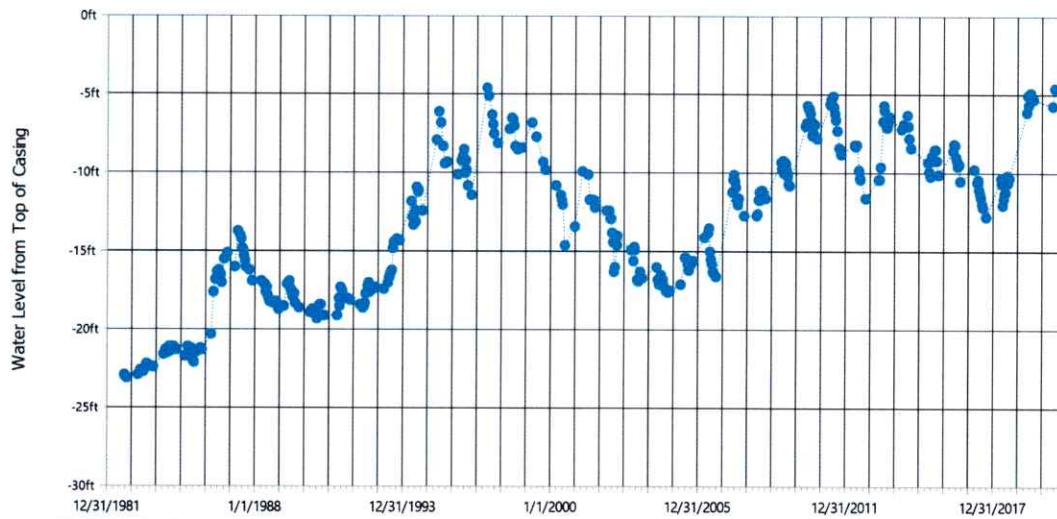
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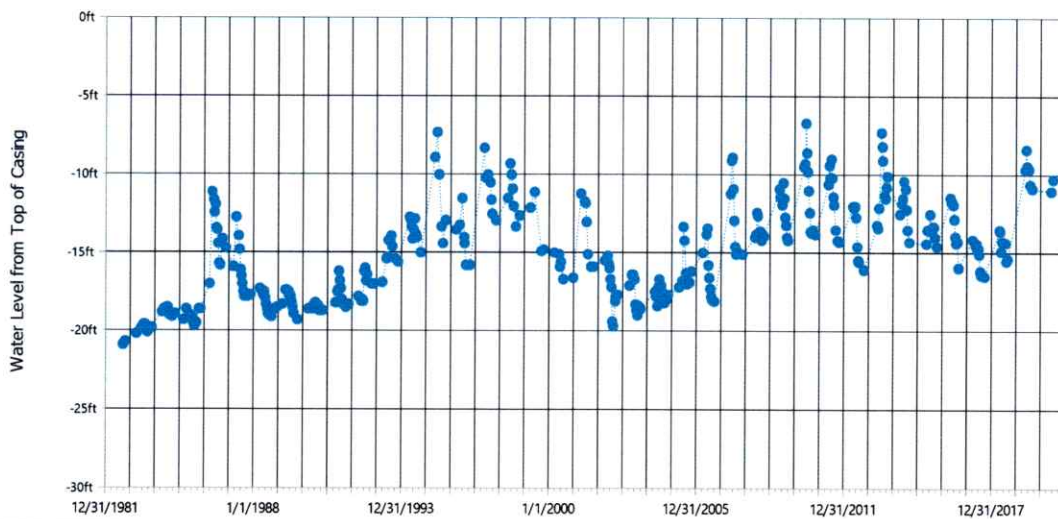
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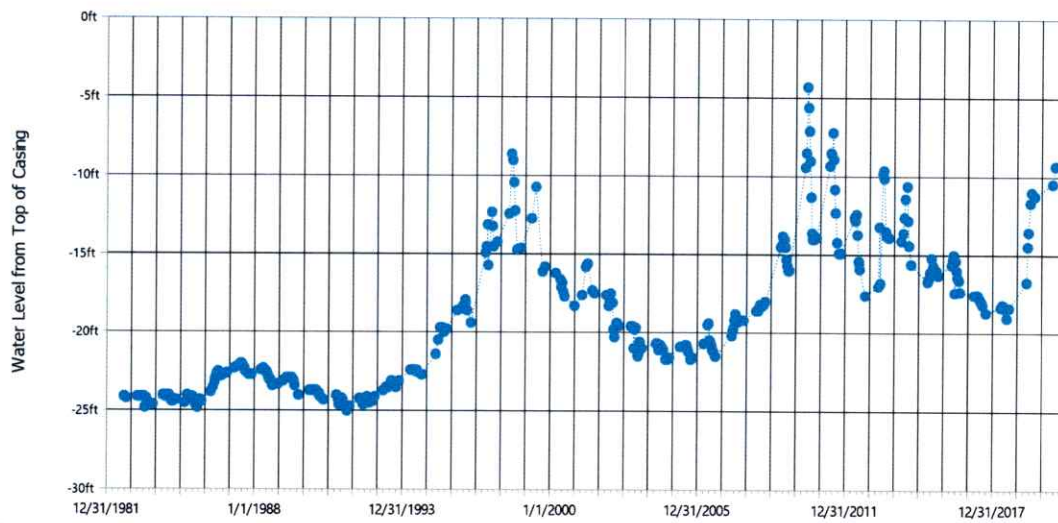
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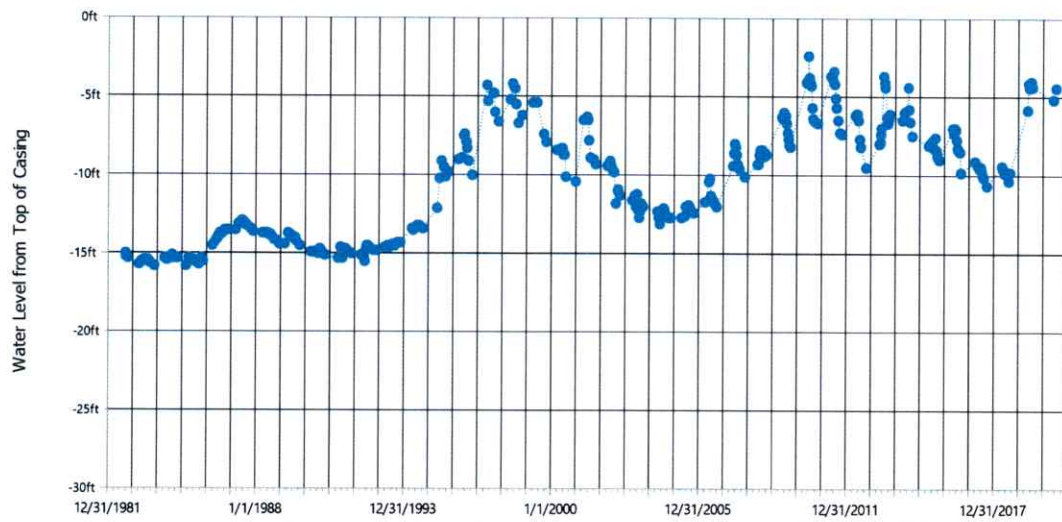
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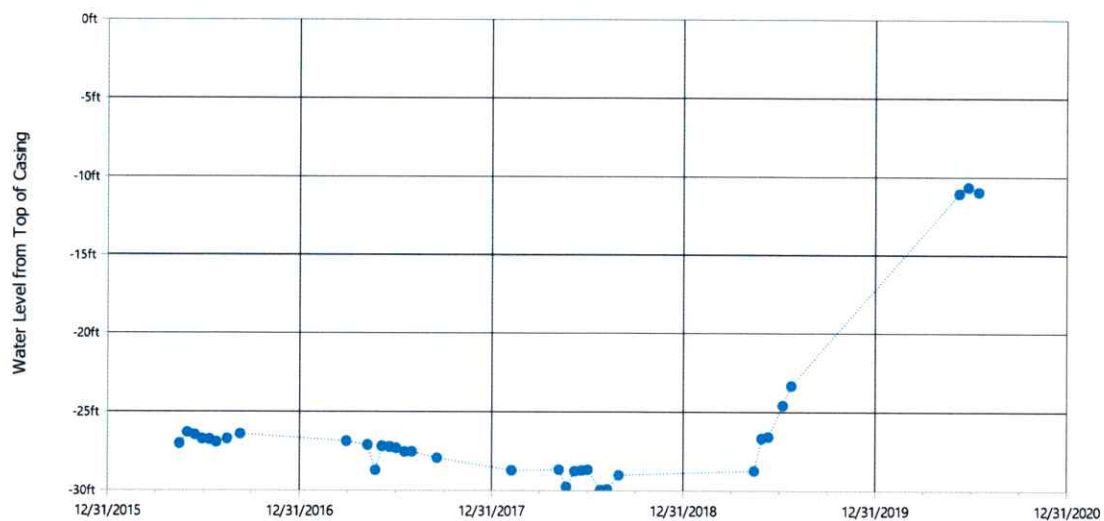
DENR Water Rights Observation Well: SP-82F



DENR Water Rights Observation Well: SP-82G



DENR Water Rights Observation Well: BD-2016A





DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

Notice of Hearing

August 24, 2020

TO: Bixler Farms and Bixler Land, c/o Reed Bixler
39477 184th St
Hitchcock SD 57348

FROM: Eric Gronlund, Chief Engineer *Eric Gronlund*

SUBJECT: Five-Year Review to Determine the Availability of Unappropriated Water in the Tulare Western Spink Hitchcock Aquifer concerning held Application No(s). 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3 and 8107-3.

IMPORTANT: Your written response is required within 30 days notifying the Chief Engineer whether you want Application No(s). 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3 and 8107-3 to retain eligibility for any water that may become available from the aquifer. Failure to provide a written response results in withdrawal of your held application(s).

The Water Management Board (Board) has determined that the average annual withdrawal of water from the Tulare Western Spink Hitchcock aquifer is equal to the average estimated annual recharge and deemed the aquifer fully appropriated. A map showing the approximate boundary of the aquifer; a copy of a public notice; and a report prepared for the Board to review will be available for public viewing on September 17, 2020, at <https://denr.sd.gov/ap>.

Pursuant to statute, the Board held a hearing for the purpose of accepting applications for potential future appropriations from the aquifer and a creation of a priority list. That hearing was held on May 7, 2015. Twenty-eight applications were prioritized and are being held by the Board for possible future action. Included in the twenty-eight applications, is/are the application(s) submitted by Bixler Farms and Bixler Land, c/o Reed Bixler: 8099-3 - NW 1/4 Sec 3-T114N-R63W; 8100-3 - SW 1/4 Sec 24-T115N-R63W; 8101-3 - SW 1/4 Sec 18-T114N-R62W; 8102-3 - SE 1/4 Sec 22-T114N-R63W; 8103-3 - SW 1/4 Sec 23-T114N-R63W; 8104-3 - SE 1/4 Sec 35-T115N-R63W; 8105-3 - SE 1/4 Sec 24-T114N-R63W; 8106-3 - NE 1/4 Sec 24-T114N-R63W; and 8107-3 - Sec 6-T114N-R62W.

Pursuant to SDCL 46-2A-7.5, the Board is required to hold a public hearing reviewing the groundwater source, all permits appropriating water from that source, and all held applications (such as yours) at least once every five years to determine whether unappropriated water has become available for use. Also, SDCL 46-2A-7.5 requires any applicant, such as yourself, to notify the chief engineer in writing within thirty days of receipt of this notice whether you desire to retain eligibility to appropriate any

water that the board may determine is available through its review of the aquifer. Failure to respond in writing within 30 days constitutes withdrawal of the application(s).

The five-year review is scheduled for Board consideration at 10:30 AM (Central Time), on Wednesday, October 7, 2020, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. You do NOT need to be present at the hearing for your application(s) to retain eligibility.

The Board is authorized to 1) determine that additional water is available for appropriation, 2) determine that no additional water is available for appropriation, or 3) defer action for further study. The hearing time is an estimate and may be delayed due to prior items on the agenda. Pursuant to SDCL 46-2-9, 46-2-11, and 46-2A-7.5, the Board has legal authority and jurisdiction to conduct this hearing. After the hearing is conducted by the Board, you will be notified of the Board's decision.

Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Questions regarding the hearing process may be directed to Ron Duvall, Water Rights Program at (605) 773-3352 or ron.duvall@state.sd.us.

To: Dept of Environment & Nat. Resources S.D.
From: Reed Bixler, representing Bixler Farms, Bixler Land.
Att: Eric Growland, Chief Engineer.

I just received your letter notifying us of your 5 yr review of the Tulare Aquifer.

We would like to remain on the priority list for these applications: 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3, 8107-3.

I am looking forward to reading your report out Sept 17.
I will be attending your hearing on Oct. 7, 2020

Thank you,
Reed Bixler

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SEP 03 2020

WATER RIGHTS
PROGRAM



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SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

Notice

October 13, 2020

TO: Bixler Farms and Bixler Land, c/o Reed Bixler
39477 184th St
Hitchcock SD 57348

FROM: Eric Gronlund, Chief Engineer *Eric Gronlund*

SUBJECT: Board Action Concerning Five-Year Review to Determine the Availability of Unappropriated Water in the Tulare Western Spink Hitchcock Aquifer and Fee Submittal Concerning held Application No(s). 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3 and 8107-3.

On October 7, 2020, the Board did not find sufficient water available to allow processing of held Application No(s). 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3 and 8107-3. If you wish No(s). 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3 and 8107-3 to continue to be held by the Board in the event water becomes available at some future date, then a fee equal to ten percent of your original application fee needs to be submitted to the Chief Engineer by November 20, 2020. Ten percent of your original application fee(s) is/are: 8099-3 - \$85.00; 8100-3 - \$85.00; 8101-3 - \$85.00; 8102-3 - \$85.00; 8103-3 - \$85.00; 8104-3 - \$85.00; 8105-3 - \$85.00; 8106-3 - \$85.00; and 8107-3 - \$85.00. If you have multiple applications, please identify which applications you are remitting the fee for unless you are remitting the total fee amount for all applications which is **\$765.00**.

Pursuant to South Dakota Codified Law 46-2A-7.5, failure to remit the fee(s) constitutes withdrawal of Application No(s). 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3 and 8107-3. If the fee(s) is/are not remitted by November 20, 2020, you will be notified of withdrawal of the application(s). Once withdrawn, an application will no longer be in line for an appropriation should it be determined at a future date that unappropriated water is available.

If you have any questions, please contact Ron Duvall, Water Rights Program at (605) 773-3352 or ron.duvall@state.sd.us. The fee(s) is/are payable to the Water Rights Program and should be sent to:

Atten. Chief Engineer
SD DENR, Water Rights Program
523 E. Capitol Ave.
Pierre SD 57501

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date October 22, 2020

RECEIVED OF Bixler Farms and Bixler Land, c/o Reed Bixler, 39477 184th St, Hitchcock SD 57349

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$
Fee to retain Future Use Permit No. _____ after period of seven years.	\$
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$
Fee for Filing Transfer Form _____	\$
Fee for <u>Retaining Eligibility of Water Permit #8107-3</u>	\$85.00
Fee for Issuing New Well Driller's License No. _____	\$
Fee for Renewal of Well Driller's License No. _____	\$
Fee for Issuing Well Pump Installer's License No. _____	\$
Fee for Renewal of Well Pump Installer's License No. _____	\$
(Any Other Work Provided by Law)	TOTAL
	\$85.00

By *Eric Gronlund*
Chief Engineer *KG*



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**RECOMMENDATION OF ACTING CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8107-3, Bixler Farms**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Acting Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8107-3, Bixler Farms, 39477 184th Street, Hitchcock SD 57348.

The Acting Chief Engineer is recommending APPROVAL of Application No. 8107-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The wells approved under this Permit and Water Right No. 3052-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The proposed well for this permit and any future replacement wells must be constructed by a licensed well driller and construction of the wells and installation of the pumps must comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Adam Mathiowetz, PE
Acting Chief Engineer
March 20, 2026

Report to the Chief Engineer on
Water Permit App. Nos. 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3, 8106-3, and 8107-3
Bixler Farms or Bixler Land
2026 February 19

The nine applications discussed in this report have the same signatory, Reed Bixler. Figure 1 shows a map of these applications and related Water Right No. 3052-3, in this report [1]. In October of 2013, the Water Management Board declared the Tulare: Western Spink-Hitchcock aquifer fully appropriated, which led to a waitlist being established in 2015, should water become available in the future. These applications have a priority date of February 25, 2015, but were given a priority rank out of the 27 currently held applications at the May 7, 2015, Board meeting.

Water Permit Application No. 8099-3 (Bixler Farms) proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of NW $\frac{1}{4}$ Section 3 for irrigation of 160 acres in the NW $\frac{1}{4}$ of Section 3; all in T114N-R63W. This application is priority 13 out of the 27 permits held in 2015. This application is in Spink County, approximately 5.5 miles east-southeast of Tulare, South Dakota.

Water Permit Application No. 8100-3 (Bixler Farms) proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SW $\frac{1}{4}$ Section 24 for irrigation of 160 acres in the SW $\frac{1}{4}$ of Section 24; all in T115N-R63W. This application is priority 19 out of the 27 permits held in 2015. This application is in Spink County, approximately 9 miles northeast of Hitchcock, South Dakota.

Water Permit Application No. 8101-3 (Bixler Farms) proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SW $\frac{1}{4}$ Section 18 for irrigation of 150 acres in the SW $\frac{1}{4}$ of Section 18; all in T114N-R62W. This application is priority 2 out of the 27 permits held in 2015. This application is in Spink County, approximately 5 miles northeast of Hitchcock, South Dakota.

Water Permit Application No. 8102-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SE $\frac{1}{4}$ Section 22 for irrigation of 160 acres in the SE $\frac{1}{4}$ of Section 22; all in T114N-R63W. This application is priority 16 out of the 27 permits held in 2015. This application is in Spink County, approximately 2.5 miles northeast of Hitchcock, South Dakota.

Water Permit Application No. 8103-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SW $\frac{1}{4}$ Section 23 for irrigation of 160 acres in the SW $\frac{1}{4}$ of Section 23; all in T114N-R63W. This application is priority 9 out of the 27 permits held in 2015. This application is in Spink County, approximately 3 miles northeast of Hitchcock, South Dakota.

Water Permit Application No. 8104-3 (Bixler Farms) proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center

of SE $\frac{1}{4}$ Section 35 for irrigation of 160 acres in the SE $\frac{1}{4}$ of Section 35; all in T115N-R63W. This application is priority 26 out of the 27 permits held in 2015. This application is in Spink County, approximately 6.5 miles north-northeast of Hitchcock, South Dakota.

Water Permit Application No. 8105-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SE $\frac{1}{4}$ Section 24 for irrigation of 160 acres in the SE $\frac{1}{4}$ of Section 24; all in T114N-R63W. This application is priority 11 out of the 27 permits held in 2015. This application is in Spink County, approximately 3.5 miles north-northeast of Hitchcock, South Dakota.

Water Permit Application No. 8106-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of NE $\frac{1}{4}$ Section 24 for irrigation of 160 acres in the NE $\frac{1}{4}$ of Section 24; all in T114N-R63W. This application is priority 8 out of the 27 permits held in 2015. This application is in Spink County, approximately 4 miles northeast of Hitchcock, South Dakota.

Water Permit Application No. 8107-3 (Bixler Farms) proposes to appropriate an additional 1.78 cfs, add a well, and irrigate an additional 180 acres to what is currently authorized by Water Right No. 3052-3. Water Right No. 3052-3 appropriates 1.88 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 6, with 140 acres being irrigated in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ Section 6; all in T114N-R62W. This application proposes to appropriate an additional 1.78 cfs from one new well to be completed into the Tulare: Western Spink-Hitchcock aquifer located near the approximate center of the NW $\frac{1}{4}$ Section 6 for irrigation of 180 additional acres located in the NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 6; all in T114N-R62W. If approved, this application and Water Right No. 3052-3 would authorize a combined total of 3.66 cfs from up to two wells for irrigation of 320 acres. This application is priority 22 out of the 27 permits held in 2015. This application is in Spink County, approximately 6.5 miles northeast of Hitchcock, South Dakota.

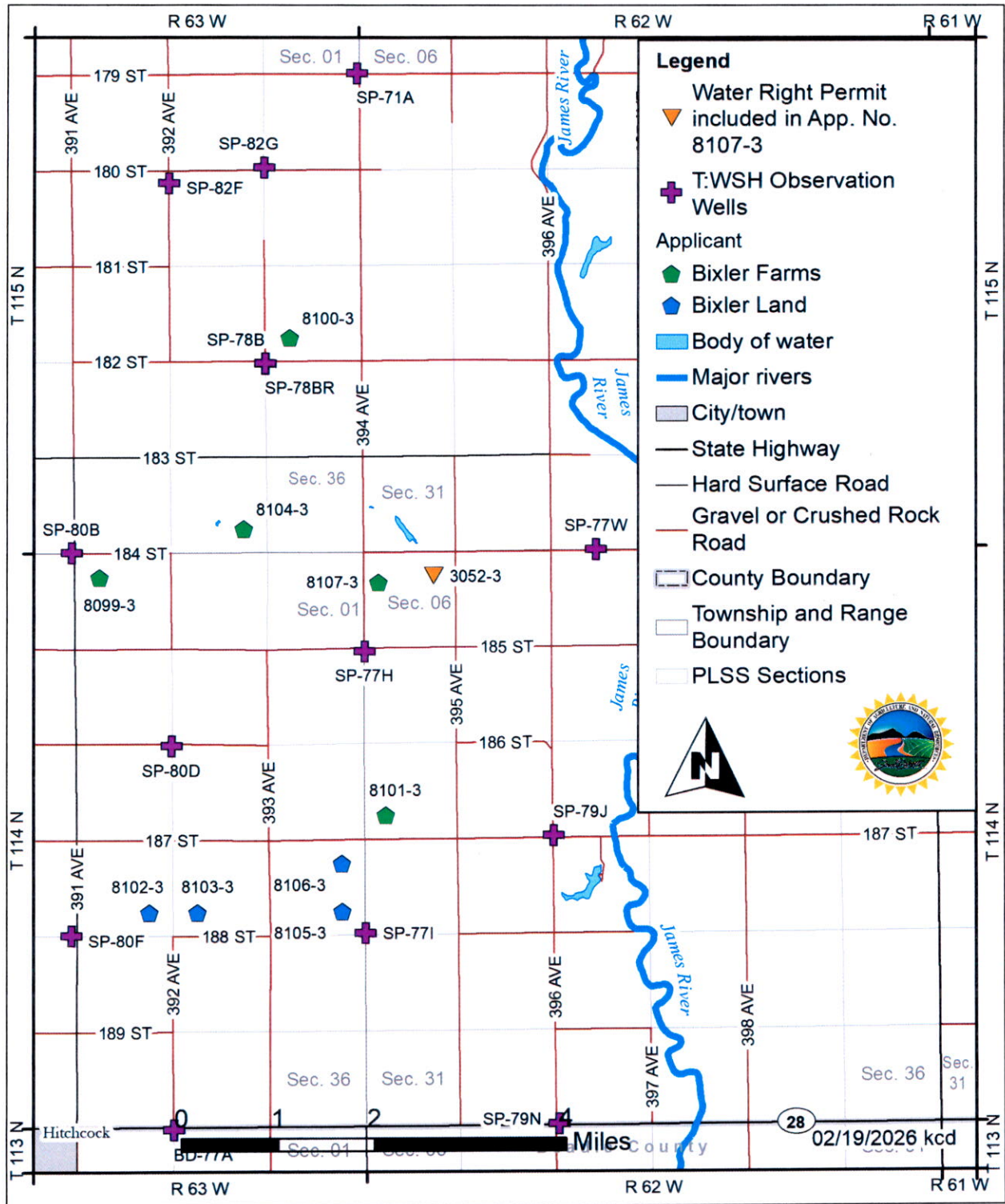


Figure 1: Map of applications and related water right permit in this report [1]

Aquifer: Tulare: Western Spink-Hitchcock

Hydrogeologic Characteristics

The Tulare aquifer is a Quaternary-aged system of sand and gravel layers that were deposited as outwash by meltwater from receding glaciers. The Western Spink-Hitchcock management unit of the Tulare aquifer is a buried aquifer generally lying immediately above the bedrock (a.k.a. basal) [2] [3]. The bedrock is composed of an erosional surface of exposed Cretaceous-aged Pierre Shale and Niobrara Formation, with the lowest erosional surface possibly incising into the Carlile Shale, which contains the Codell Sandstone member [4]. The Niobrara Formation and Codell Sandstone can also be aquifers in portions of South Dakota [5] [1]. The Tulare: Western Spink-Hitchcock aquifer underlies approximately 260,000 acres of Hand, Spink, and Beadle Counties [6] [7]. The Tulare aquifer has an average thickness of 37 feet [8]. Assuming a porosity of 0.15 [9], the estimated recoverable water in storage in the Tulare: Western Spink-Hitchcock aquifer is approximately 1.4 million acre-feet. The Tulare: Western Spink-Hitchcock aquifer is hydrologically connected several Quaternary and Cretaceous aged aquifers in physical contact with it. Buhler [10] estimated that approximately 77,000 acres of the Tulare: Western Spink-Hitchcock aquifer were under unconfined conditions in October 2012, and showed that at the time, a majority of the aquifer was under confined conditions. The area of the aquifer under confined conditions fluctuates with the amount of water in the aquifer. Since water is essentially incompressible, when the aquifer has more water in storage, more area becomes confined and vice-versa for when there is less water in the aquifer.

The applicant did not submit any well completion reports with these applications, but sufficient information is available to complete the technical review. Numerous Water Rights Program observation wells lie between and around the proposed wells for these applications (Figure 1). For example, Observation Wells SP-78B and SP-78BR (the replacement for SP-78B) lies just southwest of App. No. 8100-3. The lithologic log for Observation Well SP-78B indicates sand lies from 14 to 46 feet below grade. The observation well record indicates the aquifer fluctuates between confined and unconfined conditions near the proposed wells for these applications.

Applicable South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. This report will only assess the availability of water and possibility of developing these applications without unlawful impairment of existing domestic water uses and water rights.

Pursuant to SDCL 46-6-3.1, no application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of the water to the groundwater source. An exception allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. The applicant is not

requesting the water for use in a water distribution system as defined in SDCL 46-1-6(17) and the Tulare: Western Spink-Hitchcock aquifer is younger and stratigraphically higher than the Greenhorn Formation [11]. Therefore, the Water Management Board must find that recharge to the aquifer exceeds withdrawals to approve these applications.

Following the October 2013 Board hearing, the Board determined that the Tulare: Western Spink-Hitchcock aquifer was fully appropriated. In 2014, the South Dakota Legislature established procedure in SDCL 46-2A-7 through 7.1 for holding applications and establishing priority when the Water Management Board declares an aquifer is fully appropriated. These applications were submitted prior to February 25, 2015, pursuant to that procedure. The applicant retained eligibility through the first and second five-year reviews. After the second five-year review on December 3, 2025, the Board determined that unappropriated water was available and the permits on hold were to be processed as established by State administrative rule and State law.

Availability of Water

Hydrologic Budget

The current hydrologic budget of the Tulare: Western Spink-Hitchcock aquifer was presented before the Water Management Board in December of 2025 [12] and is summarized below. The estimated average annual recharge to the aquifer is approximately 0.83 inches per acre [13], which equates to 18,000 ac-ft/yr over the currently estimated extent of the aquifer. Withdrawals from the aquifer are mainly by irrigation from appropriative users. By taking the sum of the average irrigation reported for each permit, Drennon [12] estimated the average annual withdrawal from the aquifer was between 12,000 and 13,000 ac-ft/yr depending on the range of data used. Irrigators have been applying fewer inches per acre as time goes on but irrigating a higher proportion of their permitted acreage in any given year. The estimated average annual withdrawal from irrigation was approximately 12,000 ac-ft/yr for the period of record of 2015 through 2024, which is the last ten years of reports. Based on this hydrologic budget, there is approximately 6,000 ac-ft/yr of unappropriated water available. At the meeting, members of the Water Management Board expressed discomfort at approving the entire 6,000 acre-feet of unappropriated water but did not issue an order specifying an exact amount to which they would limit withdrawals.

For the last ten years of record, the average irrigation per reported acre was 6.63 inches per year and permit holders irrigated 79% of their permitted acres [12]. For the period of record of 1979 through 2024, the average irrigation per reported acre was 8.89 inches per year and permit holders irrigated on average 65% of their permitted acres [12]. The applications in this report request a combined total appropriation of 16.02 cfs for 1,450 acres of irrigation. Using the above values, their estimated average annual withdrawal is likely to be between 663 and 698 ac-ft/yr. The total withdrawal of the 27 held applications is likely to range between approximately 2,300 and 2,500 ac-ft/yr. Therefore, based on the hydrologic budget, there is reasonable probability that unappropriated water is available for all nine of these applications.

Table 1: Estimated withdrawals for the 27 held applications. Several applicants hold multiple applications [12].

Applicant with Held Permit(s)	Total Requested CFS	Total Requested Acres	Est. Withdrawal (ac-ft/yr)	
			6.63 in/yr @ 79% acreage utilization	8.89 in/yr @ 65% acreage utilization
Allen and Jeffrey Gatzke	2.67	110	48	53
Bixler Farms or Bixler Land	16.02	1,450	633	698
Hamilton Family LLC	2.00	145	63	70
Jeff Hamilton	4.00	290	127	140
Ken and Jodi Hofer	4.33	310	135	149
Loren or Cynthia Marzahn	2.22	160	70	77
Martin Anderson	1.86	132	58	64
Riverside Hutterian Brethren	7.70	384	168	185
Scott Hamilton	4.00	435	190	209
Van Buskirk Farms, LLP	25.65	1,798	785	866
Total	70.45	5,214	2,276	2,511

Observation Wells

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires the Water Management Board to rely upon the record of observation well analysis in addition to other information to ensure that recharge to the aquifer exceeds withdrawals. The Water Rights Program maintains 55 observation wells completed into the Tulare: Western Spink-Hitchcock aquifer. Figure 2 is a map of the Tulare: Western Spink-Hitchcock observation wells near Application Nos. 8099-3 through 8107-3, indicating which observation wells are graphed [1] [5]. Figure 3 displays hydrographs for the four observation wells nearest Application Nos. 8100-3, 8104-3, 8099-3, and 8107-3 [5]. Figure 4 displays hydrographs for the three observation wells nearest Application Nos. 8101-3, 8106-3, 8105-3, 8103-3, and 8102-3 [5]. Those observation wells are representative of the general behavior of the aquifer. In general, water levels rise during periods of higher-than-average precipitation and decline during periods of lower-than-average precipitation. There is a general trend of springtime water levels increasing with time, consistent with the increased precipitation over time in the area [14]. There are also seasonal declines during the irrigation season. The tendency of the water levels in the aquifer to be primarily influenced by climate and precipitation rather than well withdrawals indicate natural discharge is occurring, which the Water Management Board considers available for capture. Therefore, based on the record of observation wells, there is reasonable probability that unappropriated water is available for all of these applications.

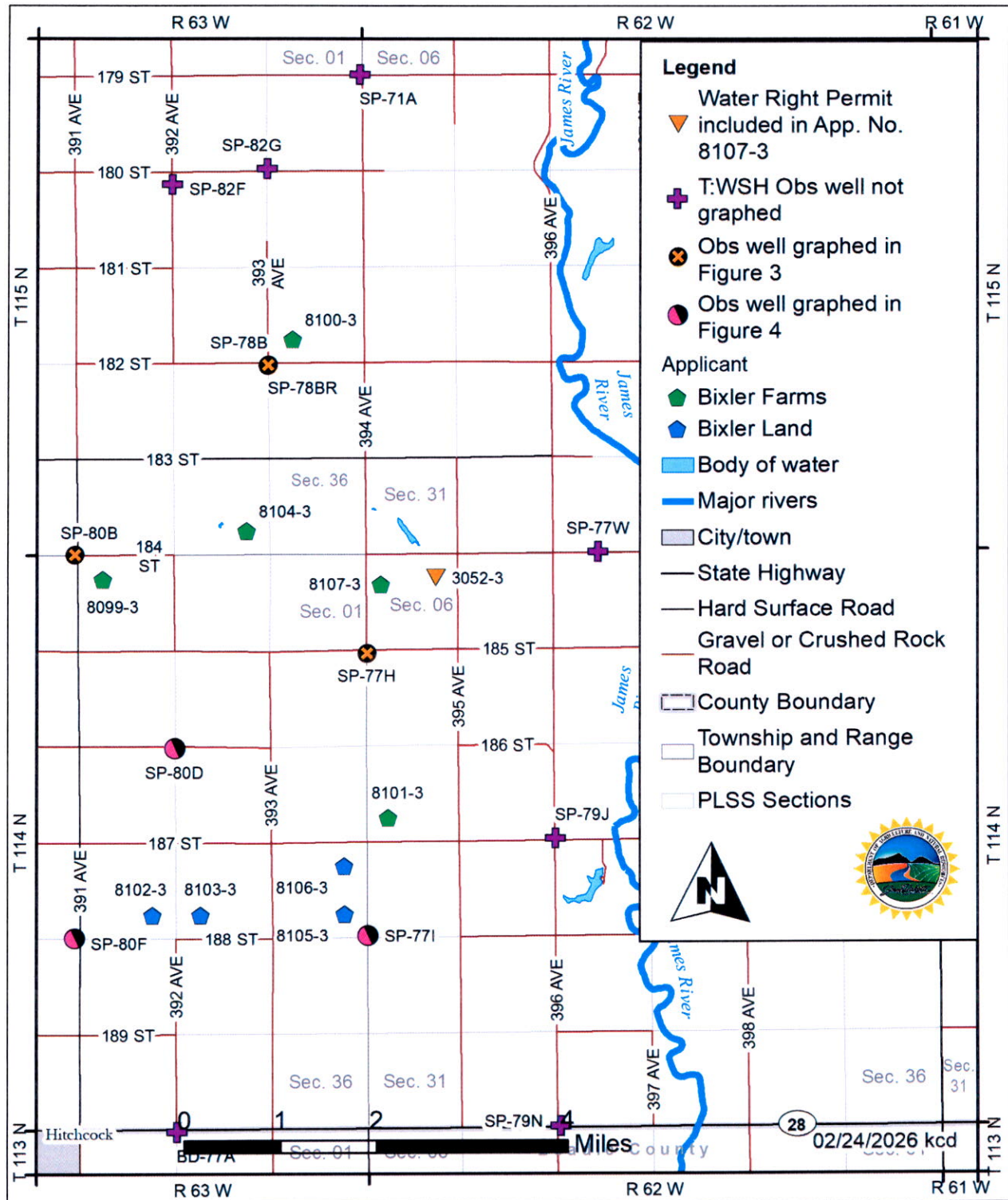


Figure 2: Observation wells near App Nos. 8099-3 through 8107-3 [1] [5]

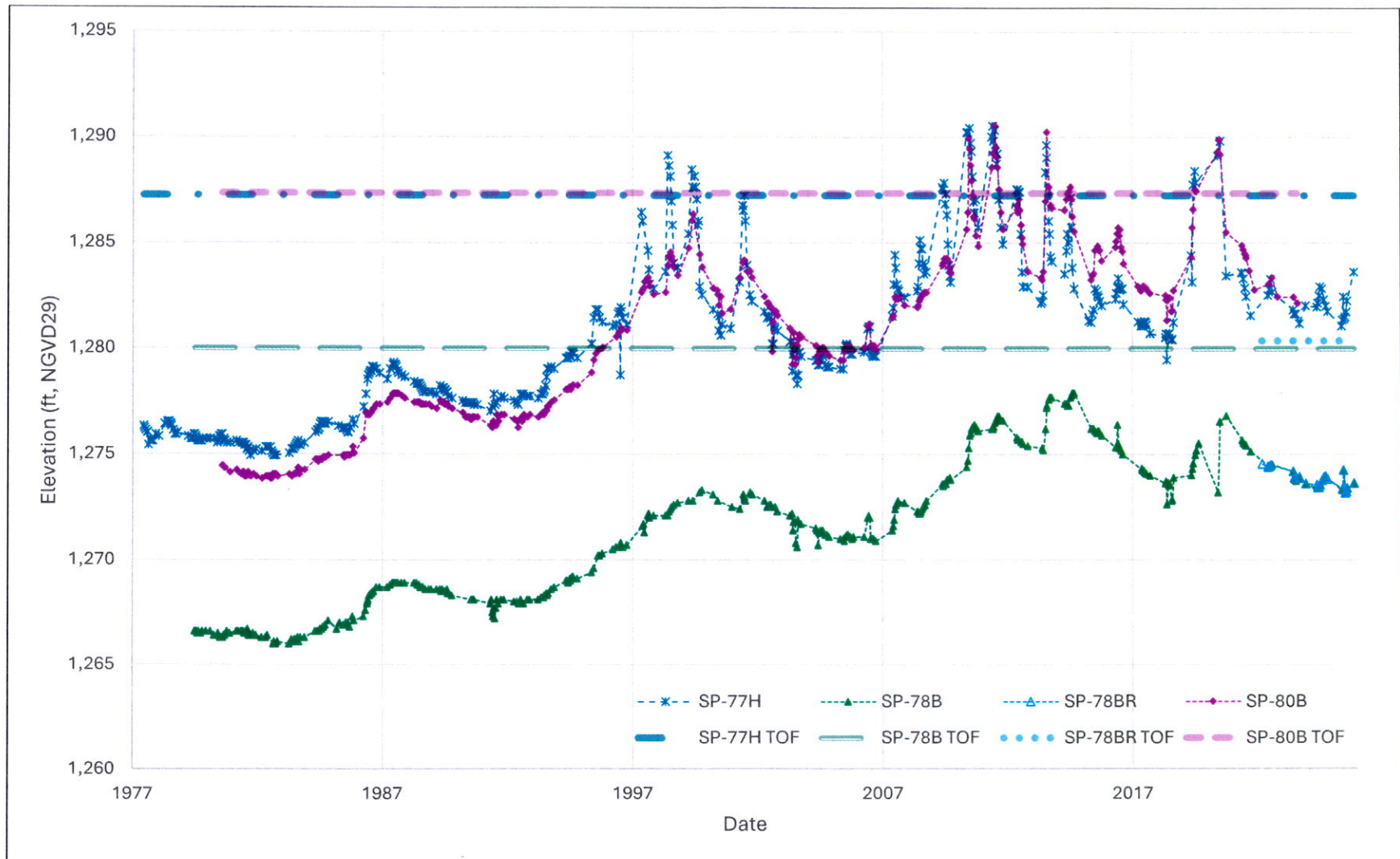


Figure 3: Observation wells near northern applications [5]. TOF = Top of Formation.

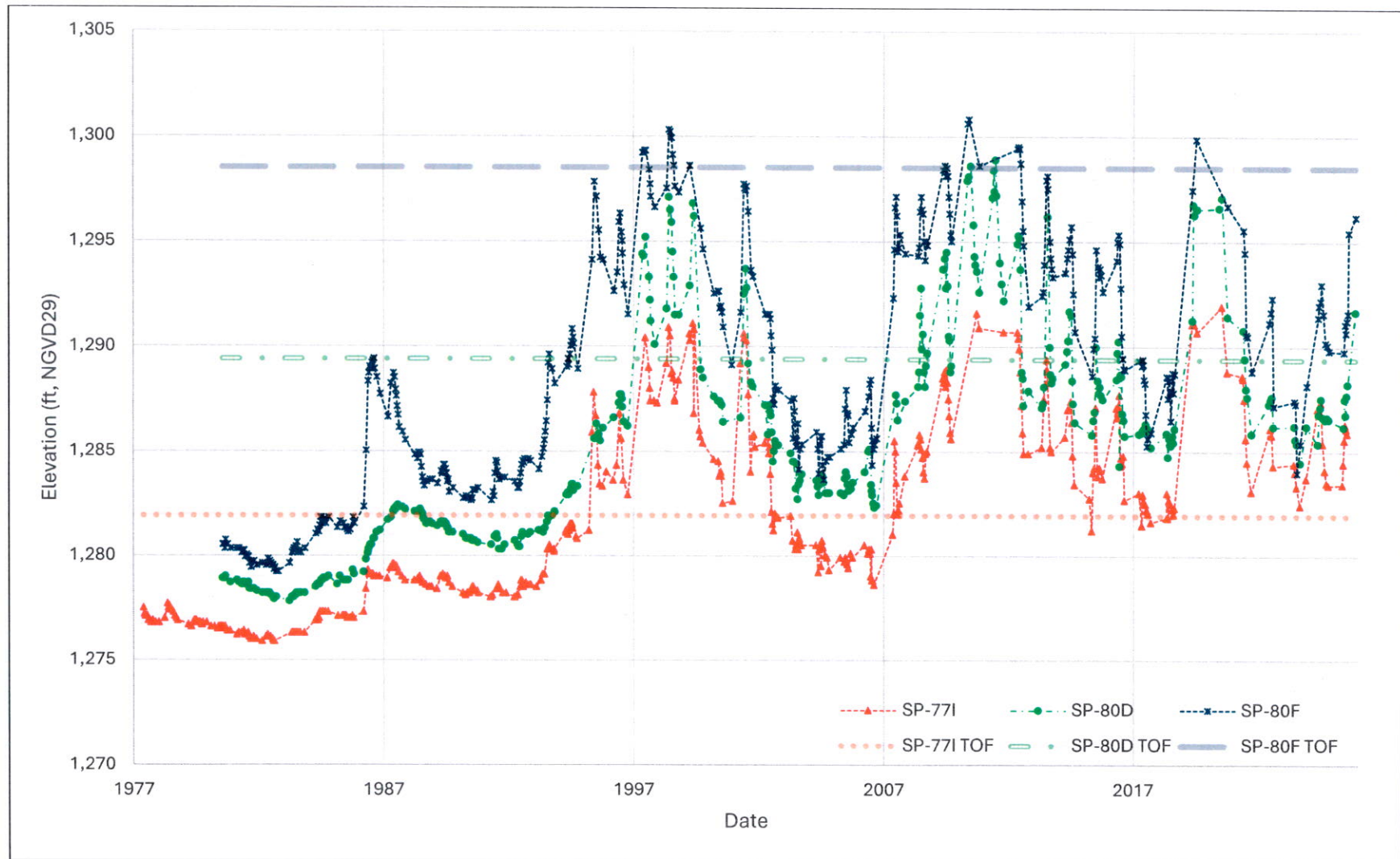


Figure 4: Observation wells near southern applications [5] TOF = Top of Formation.

Possibility of Unlawful Impairment of Existing Water Rights

There are numerous water right permits authorized to withdraw from the Tulare: Western Spink-Hitchcock aquifer near the applications in this report. Figure 5 (page 16) is a map of the northern group of applications (Nos. 8099-3, 8100-3, 8104-3, and 8107-3) and Figure 6 (page 18) is a map of the southern group of applications (Nos. 8101-3, 8102-3, 8103-3, 8105-3, and 8106-3) and other water right permits or held applications nearby [1]. Table 3 lists the water right permits and held applications in Figure 5 and Table 4 lists the water right permits and held applications in Figure 6 [1]. The nearest water rights to any of the applications in this report are 3174A-3, which is 0.4 miles east of App. No. 8100-3 (Figure 5) and 6338A-3, which is 0.4 miles northwest of App. No. 8106-3 (Figure 6). There are several domestic wells on file with the Water Rights Program that are likely to be completed into the same aquifer and within the same mile section as the proposed wells for the applications in this report [3]. The location of the domestic wells is provided by the driller and sometimes known only to the nearest quarter-quarter, so the exact distance between the proposed wells for these applications and domestic wells on file with the Water Rights Program is unknown. The Water Rights Program has historically interpreted an unlawful impairment of existing water rights to occur if a junior water right/permit causes a nearby adequate well with a senior water right/permit to become unable to withdraw at the rate it is entitled to or, if a domestic well is impacted, a water right/permit causes an adequate domestic well to be unable to withdraw at the rate needed to supply reasonable domestic use of water. ARSD 74:02:04:20(6) defines an adequate well as:

...a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet

There are no complaints on file with the Water Rights Program involving possible well interference in Spink County, despite the large number of wells in relatively close proximity throughout the Tulare: Western Spink Hitchcock aquifer [15]. The applicants own domestic and irrigation wells are closer to these applications than any other domestic or irrigation wells in the same aquifer meaning the applicants are likely to impact their own wells before any others are impacted. Therefore, based on the lack of complaints and proximity of wells owned by the applicant, there is reasonable probability these applications can be developed without unlawful impairment of existing domestic wells or senior water rights.

Conclusions

1. Water Permit Application No. 8099-3 (Bixler Farms) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of NW $\frac{1}{4}$ Section 3 for irrigation of 160 acres in the NW $\frac{1}{4}$ of Section 3; all in T114N-R63W. This application is priority 13 out of the 27 permits held in 2015.
2. Water Permit Application No. 8100-3 (Bixler Farms) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SW $\frac{1}{4}$ Section 24 for irrigation of 160 acres in the SW $\frac{1}{4}$ of

- Section 24; all in T115N-R63W. This application is priority 19 out of the 27 permits held in 2015.
3. Water Permit Application No. 8101-3 (Bixler Farms) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SW $\frac{1}{4}$ Section 18 for irrigation of 150 acres in the SW $\frac{1}{4}$ of Section 18; all in T114N-R62W. This application is priority 2 out of the 27 permits held in 2015.
 4. Water Permit Application No. 8102-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SE $\frac{1}{4}$ Section 22 for irrigation of 160 acres in the SE $\frac{1}{4}$ of Section 22; all in T114N-R63W. This application is priority 16 out of the 27 permits held in 2015.
 5. Water Permit Application No. 8103-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SW $\frac{1}{4}$ Section 23 for irrigation of 160 acres in the SW $\frac{1}{4}$ of Section 23; all in T114N-R63W. This application is priority 9 out of the 27 permits in 2015.
 6. Water Permit Application No. 8104-3 (Bixler Farms) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SE $\frac{1}{4}$ Section 35 for irrigation of 160 acres in the SE $\frac{1}{4}$ of Section 35; all in T115N-R63W. This application is priority 26 out of the 27 permits held in 2015.
 7. Water Permit Application No. 8105-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of SE $\frac{1}{4}$ Section 24 for irrigation of 160 acres in the SE $\frac{1}{4}$ of Section 24; all in T114N-R63W. This application is priority 11 out of the 27 permits held in 2015.
 8. Water Permit Application No. 8106-3 (Bixler Land) proposes to appropriate 1.78 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of NE $\frac{1}{4}$ Section 24 for irrigation of 160 acres in the NE $\frac{1}{4}$ of Section 24; all in T114N-R63W. This application is priority 8 out of the 27 permits held in 2015.
 9. Water Permit Application No. 8107-3 (Bixler Farms) proposes to appropriate an additional 1.78 cfs, add a well, and irrigate an additional 180 acres to what is currently authorized by Water Right No. 3052-3. Water Right No. 3052-3 appropriates 1.88 cfs from one well completed into the Tulare: Western Spink-Hitchcock aquifer located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 6, with 140 acres being irrigated in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ Section 6; all in T114N-R62W. This application proposes to appropriate an additional 1.78 cfs from one new well to be completed into the Tulare: Western Spink-Hitchcock aquifer located near the approximate center of the NW $\frac{1}{4}$ Section 6 for irrigation of 180 additional acres located in the NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 6; all in T114N-R62W. If approved, App. No. 8107-3 and Water Right No. 3052-3 would authorize a combined total of 3.66 cfs from up to two wells for irrigation of 320 acres. This application is priority 22 out of the 27 permits held in 2015.
 10. The Water Management Board determined in December 2025 that based on the hydrologic budget and observation well analysis, there is reasonable probability unappropriated water is available for these applications.

11. There is reasonable probability these applications can be developed without unlawful impairment of existing water rights.

Kimberly C. Drennon, E.I.
Engineer III – DANR Water Rights Program

References

- [1] Water Rights Program, "Water Right Permit Files," S.D. Dept. of Ag. and Nat. Resources, Pierre, South Dakota, 2026.
- [2] SD DANR Geological Survey Program, "Lithologic Logs," Vermillion, South Dakota, 2025.
- [3] Water Rights Program, "Well Completion Reports," S.D. Dept. of Ag. and Nat. Resources, Pierre, South Dakota, 2026.
- [4] D. W. Tomhave and L. D. Schulz, "Bedrock geologic map showing configuration of the bedrock surface in South Dakota east of the Missouri River," DANR Geological Survey Program, Vermillion, SD, 2004.
- [5] Water Rights Program, "Observation Wells," S.D. Dept. of Ag. and Nat. Resources, Pierre, South Dakota, 2026.
- [6] J. Farmer, "First Report on the Five Year Review of Water Availability Western Spink Hitchcock Management Unit of the Tulare Aquifer," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 2020.
- [7] T. Jensen and A. Mathiowetz, "Report to the Chief Engineer on Water Permit Application Nos. 8949-3 & 8950-3 Tom Tuhsbaumer & 8951-3 Tyson Nuhsbaumer," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, SD., 2025.
- [8] R. D. Benson, "Major aquifers in Spink County, South Dakota," SD DANR Geological Survey Program, Vermillion, South Dakota, 1997.
- [9] L. S. Hedges, S. L. Burch, D. L. Iles, R. A. Barari and R. A. Schoon, "Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa Tasks 1-4," US Army Corps of Engineers, Omaha, Nebraska, 1982.
- [10] K. Buhler, "Report to the Chief Engineer on Water Permit Application Nos. 7858-3, 7859-3, 7860-3, 7861-3, 7863-3 through 7872-3, 7885-3, 7894-3," SD DANR Water Rights Program, Joe Foss Bldg. Pierre, South Dakota, 2013.

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Report on Water Permit App. Nos. 8099-3 through 8107-3

Appendix A: Table of Held Permits

Table 2: All 27 held permits from the Tulare: Western Spink-Hitchcock aquifer

App No.	Name	Priority	New CFS	New Acres	Existing associated permit	Existing CFS	Existing Acres	Total CFS	Total Acres	No. New Wells	No. Existing Wells	Description of Diversion Points	Lands Irrigated
8128-3	Riverside Hutterian Brethren	1	2.22	0	2078-3	7.25	792	9.47	792	0	5	Approx. ctrs of NW 1/4, NE 1/4, SW 1/4, SE 1/4 Sec. 28, W 1/2 W 1/2 Sec. 21; all in T112N-R61W	4 @ 132 acres for 528 acres in Sec. 28; 132 acres in NW 1/4 Sec. 21
8101-3	Bixler Farms	2	1.78	150	N/A	N/A	N/A	1.78	150	1	0	Approx. ctr of SW 1/4 Sec. 18 T114N-R62W	150 acres SW 1/4 Sec. 18
8137-3	Ken and Jodi Hofer	3	2.22	160	N/A	N/A	N/A	2.22	160	1	0	Approx. ctr of NE 1/4 Sec. 21 T113N-R62W	160 acres NE 1/4 Sec. 21
8085-3	Riverside Hutterian Brethren	4	1.71	120	N/A	N/A	N/A	1.71	120	1	0	Approx. ctr of NW 1/4 Sec. 20 T112N-R61W	160 acres in NW 1/4 Sec. 20
8120-3	Martin Anderson	5	1.86	132	N/A	N/A	N/A	1.86	132	1	or 1	Approx. ctr of Sec. 18 T113N-R62W	132 acres S 1/2 Sec. 18
8131-3	Scott Hamilton	6	2.00	290	N/A	N/A	N/A	2.00	290	1	0	Approx. ctr of SE 1/4 Sec. 10 T113N-R65W	290 acres E 1/2 Sec. 10
8138-3	Ken and Jodi Hofer	7	2.11	150	N/A	N/A	N/A	2.11	150	1	0	Approx. ctr of SE 1/4 Sec. 31 T113N-R62W	150 acres SE 1/4 Sec. 31
8106-3	Bixler Land	8	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of NE 1/4 Sec. 24 T114N-R63W	160 acres NE 1/4 Sec. 24
8103-3	Bixler Land	9	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SW 1/4 Sec. 23	160 acres SW 1/4 Sec. 23
8084-3	Riverside Hutterian Brethren	10	3.77	264	N/A	N/A	N/A	3.77	264	2	0	Approx. ctrs of NW 1/4, NE 1/4 Sec. 29 T112N-R61W	2 @ 132 acres for 268 acres in N 1/2 Sec. 29
8105-3	Bixler Land	11	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SE 1/4 Sec. 24 T114N-R63W	160 acres SE 1/4 Sec. 24
8129-3	Jeff Hamilton	12	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	E 1/2 NW 1/4 Sec. 6 T113N-R64W	145 acres NW 1/4 Sec. 6
8099-3	Bixler Farms	13	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of NW 1/4 Sec. 3 T114N-R63W	160 acres NW 1/4 Sec. 3
8111-3	Van Buskirk Farms, LLP	14	1.94	136	N/A	N/A	N/A	1.94	136	1	0	Approx. ctr of NE 1/4 Sec. 36 T113N-R64W	136 acres NE 1/4 Sec. 36
8133-3	Scott Hamilton	15	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	NE 1/4 NE 1/4 Sec. 11 T113N-R65W	140 acres NE 1/4 Sec. 11
8102-3	Bixler Land	16	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SE 1/4 Sec. 22 T114N-R63W	160 acres SE 1/4 Sec. 22

Report on Water Permit App. Nos. 8099-3 through 8107-3

App No.	Name	Priority	New CFS	New Acres	Existing associated permit	Existing CFS	Existing Acres	Total CFS	Total Acres	No. New Wells	No. Existing Wells	Description of Diversion Points	Lands Irrigated
8108-3	Van Buskirk Farms, LLP	17	14.00	982	N/A	N/A	N/A	14.00	982	4	0	Approx. ctrs of Sec. 31, SW 1/4 Sec. 30, NE 1/4 Sec. 32 T114N-R63W; NE 1/4 Sec. 36 T114N-R64W	574 acres Sec. 31, 136 each SW 1/4 Sec 30, NW 1/4 Sec 32, NE 1/4 Sec. 36
8110-3	Van Buskirk Farms, LLP	18	1.94	136	N/A	N/A	N/A	1.94	136	1	0	Approx. ctr of NW 1/4 Sec. 33 T114N-R63W	136 acres Sec. 33
8100-3	Bixler Farms	19	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SW 1/4 Sec. 24 T115N-R63W	160 acres SW 1/4 Sec. 24
8121-3	Allen and Jeffrey Gatzke	20	0.89	40	N/A	N/A	N/A	0.89	40	1	0	Approx. ctr of NW 1/4 SW 1/4 Sec. 13 T114N-R63W	40 acres SW 1/4 Sec. 13
8130-3	Jeff Hamilton	21	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	W 1/2 NE 1/4 Sec. 6 T113N-R64W	145 acres NE 1/4 Sec. 6
8107-3	Bixler Farms	22	1.78	180	3052-3	1.88	140	3.66	320	1	1	new well in NW 1/4 Sec. 6, existing well in NE 1/4 SW 1/4 Sec. 6 T114N-R62W	180 additional acres in Sec. 6
8122-3	Allen and Jeffrey Gatzke	23	1.78	70	N/A	N/A	N/A	1.78	70	1	0	Approx. ctr of SE 1/4 Sec. 13 T114N-R63W	70 acres E 1/2 SE 1/4 Sec. 13
8109-3	Van Buskirk Farms, LLP	24	7.77	544	N/A	N/A	N/A	7.77	544	4	0	Approx. ctrs of SE 1/4, SW 1/4 Sec. 4, NE 1/4 SE 1/4 Sec. 5; all in T113N-R63W	4 @ 136 acres in S 1/2 Sec. 4, E 1/2 Sec. 5
8135-3	Loren or Cynthia Marzahn	25	2.22	160	N/A	N/A	N/A	2.22	160	1	0	Approx. ctr of NE 1/4 Sec. 28 T115N-R63W	160 acres NE 1/4 Sec. 28
8104-3	Bixler Farms	26	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SE 1/4 Sec. 35 T115N-R63W	160 acres SE 1/4 Sec. 35
8132-3	Hamilton Family LLC	27	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	Approx. ctr of the SW 1/4 Sec. 15 T113N-R65W	145 acres SW 1/4 Sec. 15

Appendix B: Nearby Water Right Permits

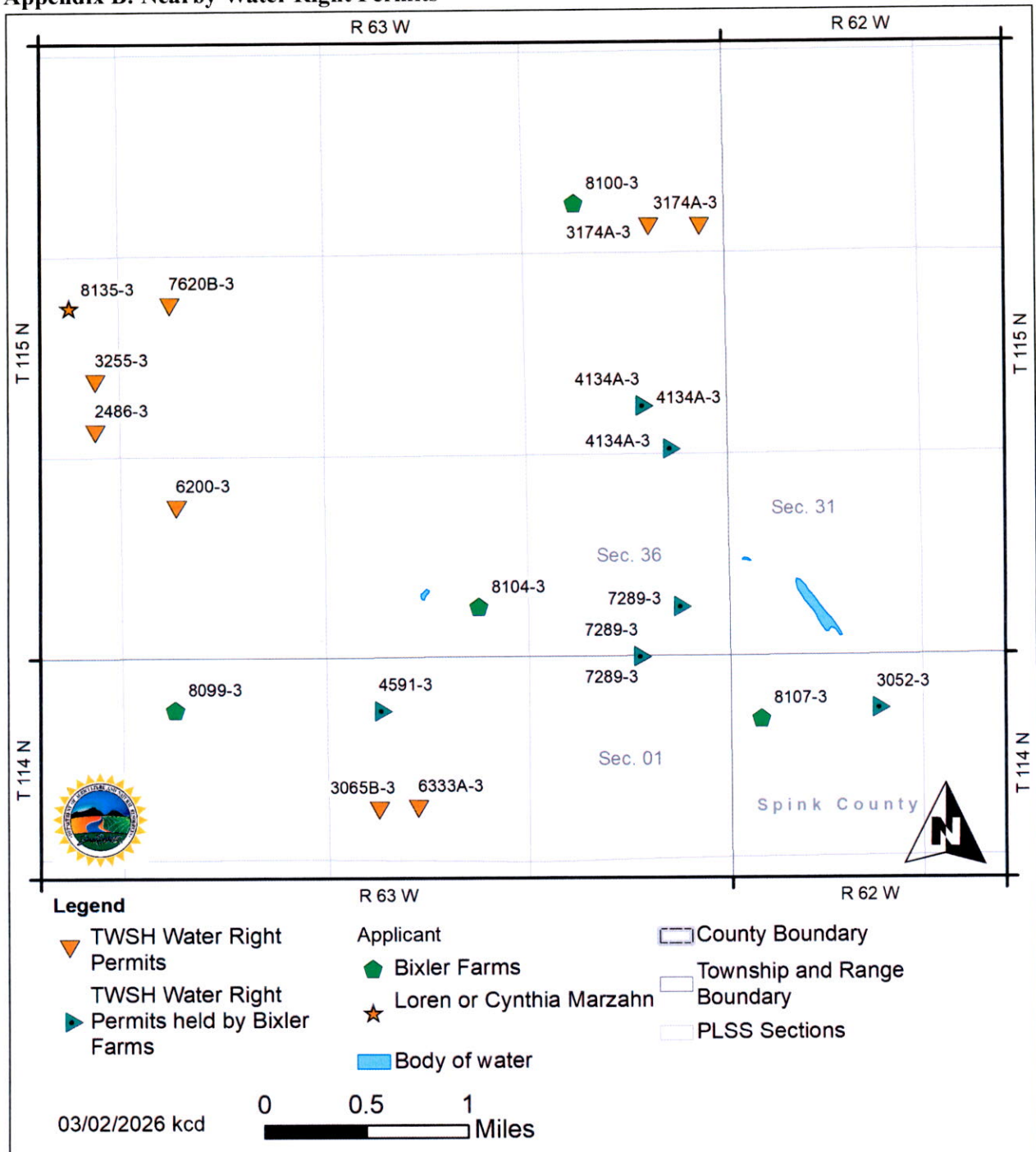


Figure 5: Water right permits and applications near Bixler Farms applications (north)

Report on Water Permit App. Nos. 8099-3 through 8107-3

Table 3: Water right permits and applications shown in Figure 5

Permit No.	Name/Business	Status	Use Type	CFS	Acres	Priority
2486-3	Clifford E Nowell	License	Irrigation	1.22	125.0	12/19/1975
3046-3	Kenneth Nowell	License	Irrigation	1.85	130.0	09/14/1976
3052-3	Bixler Farms	License	Irrigation	1.88	180.0	09/14/1976
3065B-3	Danny Peterson	License	Irrigation	1.66	130.0	10/05/1976
3174A-3	Galen & Deanna Koester	License	Irrigation	1.33	138.4	10/15/1976
3255-3	Oscar Inc	License	Irrigation	0.89	59.0	10/15/1976
4134A-3	Bixler Farms	License	Irrigation	1.33	128.0	08/30/1977
4591-3	Bixler Farms	License	Irrigation	1.88	132.0	11/06/1980
6200-3	Oscar Inc	License	Irrigation	1.89	136.0	05/08/2000
6333A-3	Danny Peterson	License	Irrigation	1.78	215.0	06/21/2002
7289-3	Bixler Farms	License	Irrigation	3.57	270.0	12/15/2011
7620B-3	Oscar Inc	Permit	Irrigation	0.91	64.0	01/04/2013
8099-3	Bixler Farms	Held	Irrigation	1.78	160.0	02/25/2015 Rank 13 of 27
8100-3	Bixler Farms	Held	Irrigation	1.78	160.0	02/25/2015 Rank 19 of 27
8104-3	Bixler Farms	Held	Irrigation	1.78	160.0	02/25/2015 Rank 26 of 27
8107-3	Bixler Farms	Held	Irrigation	1.78	180.0	02/25/2015 Rank 22 of 27
8135-3	Loren or Cynthia Marzahn	Held	Irrigation	2.22	160.0	02/25/2015 Rank 25 of 27



Figure 6: Water right permits and applications near Bixler Land and Bixler Farms applications (south)

Report on Water Permit App. Nos. 8099-3 through 8107-3

Table 4: Water rights and applications shown in Figure 6

Permit No.	Name/Business	Status	Use Type	CFS	Acres	Priority
1571-3	Allen/Bobbie Gatzke	License	Irrigation	2.11	160.0	04/23/1968
1600-3	Allen/Bobbie Gatzke	License	Irrigation	1.78	132.0	01/01/1953
3860-3	William E & Deborah A St Clair	License	Irrigation	1.94	136.0	03/10/1977
5123-3	Allen Gatzke	License	Irrigation	1.78	136.0	01/19/1987
5149-3	Allen Gatzke	License	Irrigation	1.78	132.0	09/16/1987
5897-3	Allen Gatzke	License	Irrigation	3.56	268.0	01/10/1996
6239-3	Bixler Farms	License	Irrigation	3.56	260.0	11/06/2000
6312-3	Danny Peterson	License	Irrigation	1.78	132.0	03/13/2002
6332-3	Oscar Inc	License	Irrigation	1.89	136.0	06/21/2002
6338A-3	Allen Gatzke	License	Irrigation	0.45	68.0	07/12/2002
6339A-3	Allen Gatzke	License	Irrigation	1.67	132.0	07/12/2002
6340-3	Allen Gatzke	License	Irrigation	1.67	132.0	07/12/2002
7292A-3	Allen Gatzke	License	Irrigation	1.67	133.0	07/12/2002
7292B-3	Allen Gatzke	License	Irrigation	1.67	133.0	07/12/2002
7293-3	Jeffery Gatzke	License	Irrigation	1.78	135.0	12/15/2011
7573-3	Gary Marshall	License	Irrigation	1.78	134.0	12/13/2012
7685-3	Michael Watson	License	Irrigation	1.67	75.0	02/06/2013
7725C-3	Danny Peterson	License	Irrigation	1.78	135.0	02/28/2013
8101-3	Bixler Farms	Held	Irrigation	1.78	150.0	02/25/2015 Rank 2 of 27
8102-3	Bixler Land	Held	Irrigation	1.78	160.0	02/25/2015 Rank 16 of 27
8103-3	Bixler Land	Held	Irrigation	1.78	160.0	02/25/2015 Rank 9 of 27
8105-3	Bixler Land	Held	Irrigation	1.78	160.0	02/25/2015 Rank 11 of 27
8106-3	Bixler Land	Held	Irrigation	1.78	160.0	02/25/2015 Rank 8 of 27
8121-3	Allen and Jeffrey Gatzke	Held	Irrigation	0.89	40.0	02/25/2015 Rank 20 of 27
8122-3	Allen and Jeffrey Gatzke	Held	Irrigation	1.78	70.0	02/25/2015 Rank 23 of 27



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPERS RIGHT AWAY.**

March 20, 2026

Bixler Farms
c/o Reed Bixler
39477 184th Street
Hitchcock SD 57348

Dear Mr. Bixler:

Water Permit Application No. 8107-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Redfield Press printed Redfield (Ph # 605 353-7412) and the American News printed Aberdeen (see attachment for contact number). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, and recommendation of the Acting Chief Engineer on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Acting Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

NOTICE OF HEARING on Application No. 8107-3 to Appropriate Water

Notice is given that Bixler Farms, 39477 184th Street, Hitchcock SD 57348, has filed an application for a water permit to appropriate an additional 1.78 cubic feet of water per second (cfs), add a new well, and irrigate an additional 180 acres to what is currently authorized by Water Right No. 3052-3. Water Right No. 3052-3 appropriates 1.88 cfs from one well completed into the Tulare: Western Spink Hitchcock Aquifer (65 feet deep) located in the NE 1/4 SW 1/4 Section 6 with 140 acres being irrigated in the SW 1/4 NE 1/4, S 1/2 NW 1/4, SW 1/4, W 1/2 SE 1/4 Section 6; all in T114N-R62W according to the applicant. This application proposes to appropriate an additional 1.78 cfs from one new well to be completed into the Tulare: Western Spink Hitchcock Aquifer (approximately 65 feet deep) located near the approximate center of the NW 1/4 Section 6 for irrigation of 180 additional acres located in the NW 1/4, W 1/2 NE 1/4, SW 1/4, W 1/2 SE 1/4, NE 1/4 SE 1/4 Section 6; all in T114N-R62W. This application, if approved, and Water Right No. 3052-3 will authorize a combined total of 3.66 cfs from two wells for irrigation of 320 acres. This site is located approximately six and one-half miles northeast of Hitchcock SD.

South Dakota Codified Law (SDCL) 46-2A-4(10) provides that “if the applicant does not contest the recommendation of the Acting Chief Engineer and no petition to oppose the application is received, the Acting Chief Engineer shall act on the application pursuant to the Acting Chief Engineer’s recommendation and no hearing may be held before the board, unless the Acting Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board.” In this case, the Acting Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 8107-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Acting Chief Engineer’s recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Amanda Dewell for this information, or other information, at the Water Rights Program address provided below.

The Water Management Board will consider this application at 1:30 PM (Central Time) on May 6, 2026, in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave., Pierre SD. The Acting Chief Engineer’s recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

Any person who intends to participate in the hearing shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Acting Chief Engineer. A petition opposing the application shall be filed on a form provided by the Acting Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Acting Chief Engineer. The Acting Chief Engineer’s address is “Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501” or call (605) 773-3352. The applicant’s mailing address is given above. If contesting the Acting Chief Engineer’s recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by April 7, 2026.

The petition shall be in writing and shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The May hearing date will be automatically delayed for at least 20 days upon written request to the Acting Chief Engineer from the applicant or any person who has filed a petition to oppose the application. The request for an automatic delay must be filed by April 7, 2026. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicant and all petitioners regarding the time, date, and location.

Any interested person may file a comment on the application with the Acting Chief Engineer. The comment shall be filed on a form provided by the Acting Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Acting Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by April 7, 2026.

Notice is given to individuals with disabilities that the meeting is being held in a physically accessible location. Individuals requiring assistive technology or other services in order to participate in the meeting or materials in an alternate format should contact Brian Walsh, Nondiscrimination Coordinator, by calling (605) 773-5559 or by email at Brian.Walsh@state.sd.us as soon as possible but no later than two business days prior to the meeting in order to ensure accommodations are available.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Acting Chief Engineer is April 7, 2026. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Acting Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31, 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

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Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, March 20, 2026 8:14 AM
To: ccrook@cmpapers.com
Subject: 8107-3 Bixler Farms - Public Notice
Attachments: 8107-3 public.wmb_final.docx; FORM8.FRM.doc

Attached is a notice to be published on March 25, 2026.

Bixler Farms, c/o Reed Bixler, 39477 184th Street, Hitchcock SD 57348, 605-266-2763, bixlerfarms@hotmail.com has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, Attn Rachel Rodriguez, 523 E Capitol Ave, Pierre SD 57501.

Let me know if you have questions. Please confirm receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



Rodriguez, Rachel

From: Gannett Legals Public Notices 4 <ganlegpubnotices4@gannett.com>
Sent: Friday, March 20, 2026 8:24 AM
To: Rodriguez, Rachel
Subject: RE: [EXT] 12187232 8107-3 Bixler Farms - Public Notice
Attachments: 12187232.pdf

Good Morning,

Please find your order confirmation and proof of ad attached.

Your ad is set to run in the American News on March 25. The order cost is \$105.20 which includes an affidavit, that will be mailed to you 7-10 business days after the last day of the ad printing. Please reply by 8:00 AM on Monday with any changes.

Your notice is scheduled to run per your request and will publish unless you reply to this email requesting changes or to cancel.

Our invoicing is done on a monthly basis.

You will receive an invoice for this ad after the close of the month.

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Sent: Friday, March 20, 2026 8:14 AM
To: SD-Aberdeen Legals <aan-legals@aberdeennews.com>
Subject: 12187232 8107-3 Bixler Farms - Public Notice

Attached is a notice to be published on March 25, 2026.

Bixler Farms, c/o Reed Bixler, 39477 184th Street, Hitchcock SD 57348, 605-266-2763, bixlerfarms@hotmail.com has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, Attn Rachel Rodriguez, 523 E Capitol Ave, Pierre SD 57501.

Let me know if you have questions. Please confirm receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





Order Confirmation

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Account Number:	1590418
Customer Name:	Bixler Farms
Customer Address:	Bixler Farms 39477 184Th ST Hitchcock SD 57348-7206
Contact Name:	Reed Bixler
Contact Phone:	
Contact Email:	rachel.rodriguez@state.sd.us
PO Number:	

Date:	03/20/2026
Order Number:	12187232
Prepayment Amount:	\$ 0.00

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Order Confirmation Amount

\$105.20

Affidavit of Publication

STATE OF SOUTH DAKOTA,
County of Spink: ss.

I, Cindy Crook, being duly sworn on oath, say that THE REDFIELD PRESS is a weekly newspaper as defined in Sec. 65.0508 South Dakota Code 1939, as amended by Chapter 298 of the Session of Laws of 1939, printed and published in the English language in the City of Redfield, in said County and State, by THE REDFIELD PRESS. I, Cindy Crook, am Legal Advertising Coordinator of said newspaper and know the facts herein state. The annexed notice headed:

#8208 NOTICE OF HEARING

was printed and published in said newspaper in 1 issue, to wit: The first publication be made on March 25th. That Eighty-Six and 77/100 dollars insures to the benefit of the publisher of THE REDFIELD PRESS, that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever.

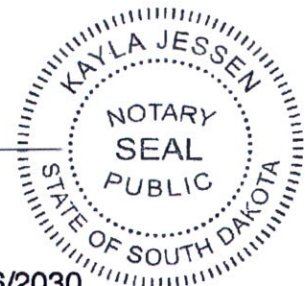
Cindy Crook

Subscribed and sworn to before me this 25th day of March, 2026

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APR 07 2026
Water Rights
Program

Kayla Jessen

Notary Public, South Dakota



My commission expires 09/26/2030

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APR 07 2026

Water Rights
Program

NOTICE OF HEARING

#8208

NOTICE OF HEARING on Application No. 8107-3 to Appropriate Water

Notice is given that Bixler Farms, 39477 184th Street, Hitchcock SD 57348, has filed an application for a water permit to appropriate an additional 1.78 cubic feet of water per second (cfs), add a new well, and irrigate an additional 180 acres to what is currently authorized by Water Right No. 3052-3. Water Right No. 3052-3 appropriates 1.88 cfs from one well completed into the Tulare: Western Spink Hitchcock Aquifer (65 feet deep) located in the NE 1/4 SW 1/4 Section 6 with 140 acres being irrigated in the SW 1/4 NE 1/4, S 1/2 NW 1/4, SW 1/4, W 1/2 SE 1/4 Section 6; all in T114N-R62W according to the applicant. This application proposes to appropriate an additional 1.78 cfs from one new well to be completed into the Tulare: Western Spink Hitchcock Aquifer (approximately 65 feet deep) located near the ap-

proximate center of the NW 1/4 Section 6 for irrigation of 180 additional acres located in the NW 1/4, W 1/2 NE 1/4, SW 1/4, W 1/2 SE 1/4, NE 1/4 SE 1/4 Section 6; all in T114N-R62W. This application, if approved, and Water Right No. 3052-3 will authorize a combined total of 3.66 cfs from two wells for irrigation of 320 acres. This site is located approximately six and one-half miles northeast of Hitchcock SD.

South Dakota Codified Law (SDCL) 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Acting Chief Engineer and no petition to oppose the application is received, the Acting Chief Engineer shall act on the application pursuant to the Acting Chief Engineer's recommendation and no hearing may be held before the board, unless the Acting Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Acting Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 8107-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Acting Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Amanda Dewell for this information, or other information, at the Water Rights Program address provided below.

The Water Management Board will consider this application at 1:30 PM (Central Time) on May 6, 2026, in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave., Pierre SD. The Acting Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

Any person who intends to participate in the hearing shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9

for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Acting Chief Engineer. A petition opposing the application shall be filed on a form provided by the Acting Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Acting Chief Engineer. The Acting Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Acting Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by April 7, 2026.

The petition shall be in writing and shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The May hearing date will be automatically delayed for at least 20 days upon written request to the Acting Chief Engineer from the applicant or any person who has filed a petition to oppose the application. The request for an automatic delay must be filed by April 7, 2026. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicant and all petitioners regarding the time, date, and location.

Any interested person may file a comment on the application with the Acting Chief Engineer. The comment shall be filed on a form provided by the Acting Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Acting Chief Engineer at the address provided above. Filing a comment does not

make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by April 7, 2026.

Notice is given to individuals with disabilities that the meeting is being held in a physically accessible location. Individuals requiring assistive technology or other services in order to participate in the meeting or materials in an alternate format should contact Brian Walsh, Nondiscrimination Coordinator, by calling (605) 773-5559 or by email at Brian.Walsh@state.sd.us as soon as possible but no later than two business days prior to the meeting in order to ensure accommodations are available.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Acting Chief Engineer is April 7, 2026. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Acting Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-28, 46-5-30.2 thru 46-5-30.4, 46-5-31, 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

Published one time at the total approximate cost of \$86.77 and may be viewed free of charge at www.sdpublicnotices.com (Mar. 25)

USA TODAY CO.



PO Box 630567 Cincinnati, OH 45263-0567

AFFIDAVIT OF PUBLICATION

Water Rights Program
Rachel Rodriguez
Water Rights Program
523 E Capitol Ave
Pierre SD 57501

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WATER

STATE OF SOUTH DAKOTA, COUNTY OF BROWN

The AMERICAN NEWS is a daily newspaper of general circulation, printed and published in Aberdeen, Brown County, South Dakota, and has been such a newspaper during the times hereinafter mentioned; and personal knowledge of the facts herein state that the notice hereto annexed was Published in said newspapers in the issue dated:

03/25/2026

That said newspaper is a legal newspaper published five days or more each week; with a bona fide circulation of more than two hundred copies daily; published in the English language within the said county of Brown for more than one year prior to the first publication of said notice; and printed in whole in an office maintained at the place of publication of said newspaper.
Sworn to and subscribed before on 03/25/2026

A handwritten signature in red ink, appearing to read "D. Roberts", written over a horizontal line.

Legal Clerk

A handwritten signature in black ink, appearing to read "Kongmeng Yang", written over a horizontal line.

Notary, State of WI, County of Brown

A handwritten signature in black ink, appearing to read "K. J. 28", written over a horizontal line.

My commission expires

Publication Cost:	\$105.20	
Tax Amount:	\$0.00	
Payment Cost:	\$105.20	
Order No:	12187232	# of Copies:
Customer No:	1590418	1
PO #:		

THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

KONGMENG YANG
Notary Public
State of Wisconsin

**NOTICE OF HEARING on
Application No. 8107-3 to
Appropriate Water**

Notice is given that Bixler Farms, 39477 184th Street, Hitchcock SD 57348, has filed an application for a water permit to appropriate an additional 1.78 cubic feet of water per second (cfs), add a new well, and irrigate an additional 180 acres to what is currently authorized by Water Right No. 3052-3. Water Right No. 3052-3 appropriates 1.88 cfs from one well completed into the Tulare: Western Spink Hitchcock Aquifer (65 feet deep) located in the NE 1/4 SW 1/4 Section 6 with 140 acres being irrigated in the SW 1/4 NE 1/4, S 1/2 NW 1/4, SW 1/4, W 1/2 SE 1/4 Section 6; all in T114N-R62W according to the applicant. This application proposes to appropriate an additional 1.78 cfs from one new well to be completed into the Tulare: Western Spink Hitchcock Aquifer (approximately 65 feet deep) located near the approximate center of the NW 1/4 Section 6 for irrigation of 180 additional acres located in the NW 1/4, W 1/2 NE 1/4, SW 1/4, W 1/2 SE 1/4, NE 1/4 SE 1/4 Section 6; all in T114N-R62W. This application, if approved, and Water Right No. 3052-3 will authorize a combined total of 3.66 cfs from two wells for irrigation of 320 acres. This site is located approximately six and one-half miles northeast of Hitchcock SD. South Dakota Codified Law (SDCL) 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Acting Chief Engineer and no petition to oppose the application is received, the Acting Chief Engineer shall act on the application pursuant to the Acting Chief Engineer's recommendation and no hearing may be held before the board, unless the Acting Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Acting Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board. Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 8107-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Acting Chief Engineer's recommendation with

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WATER



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

March 26, 2026

Bixler Farms
c/o Reed Bixler
39477 184th Street
Hitchcock SD 57348

Dear Mr. Bixler:

Enclosed is the staff report for your Water Permit Application Nos. 8099-3, 8100-3, 8101-3, 8102-3, 8103-3, 8104-3, 8105-3 8106-3 and 8107-3. You should have already received the information regarding the public notice that I sent last week. This report is for your review and records; no action is necessary.

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosure

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, March 20, 2026 11:32 AM
To: bixlerfarms@hotmail.com
Subject: Bixler Water Permit Application - Public Notices
Attachments: 8099-3 Ltr.pdf; 8099-3 ANews Info.pdf; 8100-3 Ltr.pdf; 8100-3 ANews Info.pdf; 8101-3 Ltr.pdf; 8101-3 ANews Info.pdf; 8102-3 Ltr.pdf; 8102-3 ANews Info.pdf; 8103-3 Ltr.pdf; 8103-3 PubNotice.pdf; 8104-3 Ltr.pdf; 8104-3 ANews Info.pdf; 8105-3 Ltr.pdf; 8105-3 ANews Info.pdf; 8106-3 Ltr.pdf; 8106-3 ANews Info.pdf; 8107-3 Ltr.pdf; 8107-3 ANews Info.pdf

Importance: High

Good morning,

Attached is a copy of the acting chief engineer's recommendation, and information regarding the public notice for your water permit applications. As stated in the letters, please contact the paper(s) as soon as possible to authorize publication and arrange for payment. This information is also being mailed to you today.

Let me know if you have questions. Please confirm receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

May 20, 2026

Bixler Farms
c/o Reed Bixler
39477 184th Street
Hitchcock SD 57348

Dear Mr. Bixler:

Enclosed is Water Permit No. 8107-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Adam Mathiowetz, PE
Acting Chief Engineer
Water Rights Program

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
Posting on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 8107-3

Name of Applicant: Bixler Farms, c/o Reed Bixler

Date of Posting: 3/24/2026

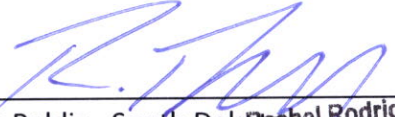
Date of Removal: 5/20/2026


Amanda Dewell, Permitting Administrator

5/20/2026

Date

Subscribed and sworn to before me, a notary public, this 20th day of May, 2026.


Notary Public - South Dakota Rachel Rodriguez
My commission expires: May 16, 2029

(SEAL)

